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PAPER TRADE JOURNAL

Reg. U. S. Pat. Off.

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ESTABLISHED 1872

THE INTERNATIONAL WEEKLY OF THE PAPER AND PULP INDUSTRY AND THE PIONEER PUBLICATION IN ITS FIELD

FIFTY-FIFTH YEAR

Published Every Thursday by the

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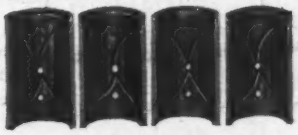

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BY THE RECENT READJUSTMENT in long distance rates, it is calculated that telephone users will save $3,000,000 annually. Interstate and intersectional rates are substantially lower. The greater the distance, the greater the reduction. Here are typical station-to-station day rates, old and new: New York to Pittsburgh, formerly $2.10; now $1.70. Chicago to Boston, $5.45—$3.95. Atlanta to San Francisco, $13.65—$9.40.

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Those who wish to take advantage of the lowest long distance rates of the twenty-four hours may now do so beginning at 8:30 P. M. From this hour to 4:30 A. M., station-to-station rates are about fifty per cent of day rates. Now, more than ever, long distance calls are useful in the development of business. Thousands now use the telephone nationally. By telephone you can make a week's trip in a few minutes. Is there a distant call that would clear up some troublesome transaction? It probably would cost less than you think. . . . *Number, please?*

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PAPER TRADE JOURNAL

With Which Is Combined

PAPER

Vol. LXXXIV, No. 4 — Thursday, January 27, 1927

The Magazine of the Paper Industry

Canadian I. P. Co. Elects Board of Directors

Officers Chosen at Meeting of the Company in Montreal Monday — Company Which Was Formed in 1916 Has Had Rapid Growth—Upon Completion of the Gatineau Mill It Will Have a Daily Capacity of 1300 Tons of News Print of Which It Will Be the Largest Producer in the World Outside of the Parent Company

MONTREAL, Que., January 24, 1927.—The Canadian International Paper Company at a meeting held here today elected the following board of directors:

Hon. R. B. Bennett, K.C., Calgary; Hon. Raoul Dandurand, K.C., P.C., LL.D., Montreal; V. M. Drury, Montreal; Gordon C. Edwards, M.P., Ottawa; J. H. Fortier, Quebec; Hon. Sir Lomer Gouin, K.C.M.G., LL.D., Montreal; A. R. Graustein, New York; Neil C. Head, New York; John R. Macomber, Boston; George H. Montgomery, K.C., Montreal; J. M. McCarthy, Quebec; J. W. McConnell, Montreal; H. C. Phipps, New York; Hon. Donat Raymond, Montreal; T. A. Russell, Toronto; F. N. Southam, Montreal; Hon. Smeaton White, Montreal; Brig.-General J. B. White, D.S.O., Montreal; A. H. Wiggin, New York; E. R. Wood, Toronto.

Company Formed in 1916

The Canadian International Paper Company was formed in 1916 by a special Act of the Province of Quebec. It has had a rapid growth. It took over upon its formation substantially all the properties in the Province of Quebec controlled by the International Paper. In 1919, it began the construction of its first mill at Three Rivers, Que. That mill, which was doubled in 1926, now has a daily capacity of 700 tons and is the largest news print mill in the world. Upon the completion of the news print mill now being built at Gatineau the company will have a daily capacity of about 1,300 tons of news print, establishing it not only as the largest news print producer in Quebec, but as the largest in the world outside of International Paper Company itself.

Other Properties of the Company

In addition to its news print properties, Canadian International Paper Company also owns the Kipawa and Hawkesbury mills formerly of the Riordon Company. These mills have an aggregate daily production of a little short of 400 tons of bleached sulphite pulp. Thus Canadian International Paper Company is also the largest producer of bleached sulphite in Canada.

These great mill properties draw their timber supply from upwards of 10,000,000 acres of Quebec Crown timber limits, a reserve so great as substantially to ensure the permanence of the company's mills. That reserves of such size are necessary will be appreciated from the fact that the four mills of the company when running full will consume over 750,000 cords of wood a year, or a quantity equal to the entire consumption of pulpwood in Quebec as recently as 1915.

Invested Capital Over $100,000,000

These properties, representing with their working capital an investment in excess of $100,000,000, have been financed almost entirely by the parent company, so that Canadian International Paper Company to-day has no bank loans and less than $3,000,000 of funded debt, consisting of the Hawkesbury first mortgage debentures and various small purchase money liens on some of the timber properties. The three big mills at Kipawa, Gatineau and Three Rivers are all free and clear of mortgage.

At Kipawa and at Gatineau the company buys its power supply from the Gatineau Power Company, another wholly-owned subsidiary of International Paper Company.

Paper Shipments From Finland Decrease

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., January 25, 1927—With the exception of sulphite pulp, which shows an increase of 12 per cent, shipments of pulp and paper from Finland during the first eleven months of last year on the whole registered a decrease in comparison with the corresponding period of 1925.

Exports of news print paper which ranks next to sulphite pulp, in the volume of shipments, dropped from 139,797 metric tons to 132,803 tons, while exports of groundwood amounting to 65,737 tons, and of sulphate pulp, amounting to 69,903 tons, show decreases of 7 per cent and 2 per cent respectively. Exports of boards and other classes of paper, amounting to 97,819 tons, were 7 per cent under the volume of shipments during 1925.

To Investigate Cost of Paper Handling

[FROM OUR REGULAR CORRESPONDENT]

BOSTON, Mass., January 24, 1927.—Committees were appointed to investigate the cost of handling orders out of warehouse on Nos. 1 and 2 kraft paper, tissues and twine at the meeting of the Wrapping Paper Division of the New England Paper Merchants Association held January 18. These committees are to report at the meeting of January 27. Eighteen attended the meeting. Those firms represented that are located in other cities than Boston included the Providence Paper Company, Providence, R. I.; F. J. Flemings,, Lowell, Mass.; C. A. Esty Paper Co., Worcester, Mass.

Demand for Paper Less Active in Philadelphia

Quiet Period Believed to be Only Seasonal, and Prices Are Being Well Maintained—General List of Fine Papers Only in Light Request, With Few Exceptions—Coarse Paper Grades Moderately Active at Present—Salesmen Begin Strenuous Campaign

[FROM OUR REGULAR CORRESPONDENT]

PHILADELPHIA, Pa., January 24, 1927.—While distributors during the past week were chiefly concerned with disposing of hold overs from the inventory of 1926, there were a few orders of notable size reported by the wholesale paper houses. Generally speaking the trade is now approaching that period of uncertainty customary with the closing of old year accounts, and pending some definite trend of industrial activity in preparation for springtime renewals of business. There have been no price revisions, except where special offerings have been made in hang over 1926 stocks that have either been shop worn, or slow selling numbers.

Fine Papers Fairly Active

Although a few grades of fine papers continue in demand, the general list is showing signs of falling off with the advancing month. A few of the wholesale houses report a continued demand for book paper and coated grades now being used by the publishing and advertising trades in early 1927 activities. Writing papers and engraved announcement stocks have been holding fairly well, the demand being largely among commercial engravers now operating on announcements of new year changes and business developments. A few new fine papers have been announced by the mills now beginning their canvas of the Quaker City trade of the 1927 schedule. Many new shades have been added to the lines of cover and printing grades that have been created to blend with the modish hues of wearing apparel.

Coarse Grades Less Active

Coarse paper dealers are more interested in the disposition of their old 1926 hang overs than in stocking for the future. The dealers are prone to hold off orders from the mills pending some more definite indication of what may be expected in the business world with the springtime revival of industry. While manufacturers and merchants are replemishing their diminished supplies of coarse papers, such as wrappings, krafts, and other grades, more commonly used for the present needs, they state that they prefer to hold off larger purchases until they are assured that their prospects warrant heavier stocking. Offerings of holdovers from the old year have been readily absorbed by the consumers for their hand to mouth needs of the present and at slightly less cost than the regular goods. In other years there has been much slashing of values on old goods, but so far only slight recessions are noticeable in disposing of the 1926 stocks.

Mill Men Begin Local Activities

Now that the dealers are making way for the installation of new lines for the 1927 stocking, the mills representatives appearing in the local market are becoming more numerous. Many officials and salesmen are now making the rounds of the trade with their standard goods and new numbers to augment the old lines. Orders are not freely forthcoming because of the tendency of the distributors to hold off until assured that the industrial world is to continue on the old year schedule of activity and prosperity.

Vegetable Parchment Situation

Some Philadelphia dealers have been commenting upon the peculiar situation in the vegetable parchment market, and competition with the foreign manufacturers in controlling the distribution in this country. While the recent drastic cut may aid in stimulating the use of American made vegetable parchment in this country, these dealers believe that odds are against the native product. A prominent Quaker City distributor, well versed in the American and foreign made products, advances his opinion regarding the conditions to be contended with in that particular grade of paper. He states that despite the lowered cost of the American made vegetable parchment, the foreign made product has the advantage in both material and cost, as a menacing competitor to our own grades. The low tariff and the lower cost of manufacture abroad, as well as the more pliable sheet that the foreigner can turn out in the opinion of this observer are factors that promote the sale of the foreign grade in this country to the detriment of the home manufactured. Even with the lowered quotations that were made in the first days of the current year, the foreign made vegetable parchment may be had at ½ cent less than the American, says this authority. Another factor which has deterred the local distributors from handling parchments in quantity is the fact that mills go after direct consumer trade and it does not pay for the dealers to stock appreciably with these wares, sales being so limited that no profits are to be had. This dealer urges the American manufacturers to seek out a remedy that will enable the distributors to profitably engage in the sale of home made parchments.

Crop of New Houses Lacking

In former years January was marked by the addition of new paper houses to the local list of distributors. This year the usual crop of smaller dealers that perennially make their appearance has been lacking. The distributors believe that the trade would be better off with fewer firms and be better able to combat the competition which heretofore has promoted slashing and the uncertainty of prices.

Fine Paper Division Meets

Fine paper dealers associated with the Philadelphia Paper Trade Association met at the Bourse Restaurant, and after a discussion of the new 1,000 sheet count to be effective on February 1, joined in the luncheon. James McCracken, sales manager of Riegel & Co., was chairman of the session.

District of Columbia Paper Co.'s Four Point Plan

At the special meeting called by the District of Columbia Paper Company, of Washington, D. C., at the Hotel Benjamin Franklin, last week, it was decided that the Philadelphia territory be confined to a four point distribution plan. Heretofore the District of Columbia Company has been selling to all dealers with no set policy for the distribution of its lines of printing papers, announcements, blotters, cover, box makers and other papers. Under the new policy of a four point distribution in the Quaker City, the following dealers have been assigned to handle the manufacturers products—Wilcox, Walter, Furlong Company, Whiting Patterson Company, Lindsay Paper Company and Raymond and McNutt. They will be the exclusive distributors of the District of Columbia for Philadelphia and vicinity. At the meeting, Wilber Langtry, who represents the manufacturers, presided, while his associates in the local field joined in the dinner given by the firm. He outlined the policies under which the four local dealers are to promote the sales of the printing and other papers made by the company in the future, and for the current year's campaign backed by the advertising of the mills.

Reading Paper Mills Bring Out New Papers

Philadelphia dealers featuring the products of the Reading Paper Mills, of Reading, Pa., are now adding the newest of grades to be brought out by the manufacturers. The new line is entitled the Kinkora papers. They are made in the book cover grades and pasted. The color scheme in the six new shades range into

the more modish and striking hues from the 1927 color card of the textile and wearing apparel industries. They are uniquely startling in their brilliancy of colors. They are being stocked by the Paper House of Pennsylvania and the Lindsay Paper Company, Quaker City distributors for the Reading Mills.

Richie-Howarth Co. in New Home

Larger and more convenient quarters have been acquired in the building at 804 Sansom street, known as the Lindsay Building, and long occupied by prominent paper houses, by the Richie-Howarth Company formerly located at 12th and Cherry streets. The Richie-Howarth Company about a year ago became distributor of an exclusively one house product, that of the Eagle A papers of the American Writing Paper Company. During the week the firm removed from the Cherry street address to the two floors in the Lindsay Building also occupied by the Lindsay Paper Company.

The Richie-Howarth Company will occupy the main floor of the building and a larger part of the fifth floor for its paper house. There will be continued the paper ruling department, which for more than a score of years has been one of the leading concerns of its kind in the country, long known as the Anthony Richie Company. The paper ruling department is located on the fifth floor, and the firm has acquired the additional space adjoining the department for paper warehousing purposes. The entire main floor will be given over to the paper sales offices and executive headquarters, while the rear portion will be devoted to warehousing and displays.

Improve Phil-Fibre Mills

Modernizing improvements to the plant of the Phil-Fibre Mills manufacturers of folding box board, have provided for the installation of Huber Stockers in the boiler equipment, three boilers having been fitted with the apparatus. The mechanical feeds are manufactured by the Huber Stoker Company of Baltimore. There has also been added a cutting and pasting department with equipment of Seybold Cutters for cutting folding box board and chip and news board.

Lindsay Paper Co. Puts Out Unique Sampler

A cleverly arranged and unique and serviceable display case containing the various samplers of papers handled by the Lindsay Paper Company, 804 Sansom street, has just been compiled and is ready for distribution. The papers are packed into an upright boxed compartment with several jackets indexed and labeled. The sheet contains all information on the papers in the jacket and is attached to a stepped arrangement of colors in which these papers come. They are arranged in labeled jackets such as bond, and ledgers, and writing; cover papers; coated papers; indexed bristols; onion skins and manifold papers.

Exhibitors at Poor Richard Convention

Philadelphia's representative paper houses were included among the exhibitors that featured the advertising displays at the Bellevue Stratford during the early days of the week as part of the convention program of the Poor Richard Club. Those who were interested in the distribution of fine papers for the advertising trades made their specialties a part of the show.

The Dill and Collins Company showed illustrated speciments of the advertisements on the De and Se Antique Tints; highly coated papers of the D. C. Black and White grades; Dulbrite Coated; Dilcol Direct Mail Line; Envelopes; Dilfold Enamel; Flat White; Superb Dill Coated Offset, Dilcol Translucent, and others.

Italian Pressed, deckle edged, watermarked, laid book papers and English Coverings of distinction were featured in the Whiting Patterson Company, along with the Albermarle's Vienna Moire Blotters and the Executive Covers of the District of Columbia Paper Company.

Among the displays of the Reading Paper Mills arranged by the Paper House of Pennsylvania and the Lindsay Paper Company, were the Kinkora, Louvain and Bodleian book papers. The Paper Homes also made the Strathmore line in a wide range of assortments part of its exhibits.

Photographic reproductions of the displays of the Graphic Arts Room of the D. L. Ward Company were shown in the paper group and gave a broad idea of the assembled permanent exhibition of printed ad matter in the 1,000 ideas gathered for the display.

The Japan Paper Company showed French and other European and Oriental paper specialities featured for the ad trade and printers.

Consolidated Paper Co. Capitalized at $10,000,000

[FROM OUR REGULAR CORRESPONDENT]

MONROE, Mich., January 24, 1927.—Stockholders of the Consolidated Paper Company, in annual meeting at the executive offices of the company authorized the board of directors to declare a 50 per cent stock dividend on all the common stock of the company. The dividend increases the capitalizaion of the Consolidated Paper Company to $10,000,000

Capitalization previous to the increase authorized by the stockholders in session today was $7,500,000, a total which will be augmented by one-third.

Reports of extensive building projects completed by the company during the fiscal year were read to the stockholders by E. C. Rauch, president of the company. Two new mills have been erected by the company, one at the Monroe plant, and one at River Rouge. In addition, one of the old mills at the Monroe plant has been completely rebuilt and equipped with the most modern and up-to-date features of the manufacture.

No extensive building program was announced for 1927.

The Consolidated paper company, whose executive offices and main branch are at Monroe, is one of the most extensive manufacturers of corrugated paper board, boxes and allied products in operation in the United States today. Besides its mammoth plant in Monroe, the Consolidated Company is operating a large paper mill at River Rouge, which was completed by the company during the past year.

More than 2,000 employees, both men and women, and their families are dependent upon the Consolidated paper company. More than 1,800 persons are employed at the Monroe plant alone.

The board of directors was re-elected in its entirety for 1927. They are: E. C. Rauch, H. L. Rauch, L. W. Leathers, D. B. Leathers, I. A Newcomer, L. W. Newcomer, E. C. Betz, W. C. Tullis, W. O. Dodd, John L. Bronson, J. C. Bulis, L. C. Knapp, Leathers, Charles Eggert, W. S. Connant, Fred E. Williamson. Albert Lockwood and William Gray.

The growth of the Consolidated Paper Company during 1926 was one of the greatest instances of industrial expansion in Monroe during the past year. The building projects completed by the company are among the most costly industrial construction improvements erected in Monroe during 1926.

Plans for Southeastern Division Meeting

Plans are progressing very satisfactorily for the meeting of the Southeastern Division of the American Paper and Pulp Mill Superintendents Association to be held at Richmond, Va., March 4. In addition to numerous other papers, the committee has been promised one on "The Rosin Industry." This paper, which will be presented by one of the representatives of the Paper Makers Chemical Company, will be illustrated with moving pictures and it is said will be very interesting and informative. In addition to this paper, V. S. Denison of the Paper and Textile Machinery Company will present a paper on "Suction Rolls" and B. H. Vanoot, State Supervisor of Trade and Industrial Education, will discuss "Vocational Training in the Paper Industry" along the lines of what may be done rather than what has been done. The Committee of Arrangements for the meeting is as follows: B. K. Steadman, Chairman; Harry W. Deffew and E. H. Neblett of the Standard Paper Manufacturing Company, and A. S. Hooper and H. Owen of the Albemarle Paper Manufacturing Company.

Canadian Paper Industry Enjoyed Record Year

Production of News Print Mills in Canada Now Definitely Surpasses United States Output—New Plants and Extensions During Present Year Will Increase Capacity to 8,500 Tons Per Day—Erection of New Cap Rouge Mill to Commence Shortly

[FROM OUR REGULAR CORRESPONDENT]

MONTREAL, Que., January 24, 1927.—When the members of the Canadian Pulp and Paper Association gather in Montreal at the end of the present week for the annual convention, they will hear from the President a report of what has undoubtedly been the most successful year in the pulp and paper industry that Canada has ever known.

During the year the production of news print in Canadian mills rose from 139,688 tons in January to 168,500 tons in October, the peak month, and the year closed with a definite lead in the production of Canadian mills, as compared with mills in the United States, of 28,000 tons per month.

For the whole year the production was 1,881,737 tons, as compared with 1,686,695 in United States mills. At the close of the association's year the capacity of Canadian mills was 7,300 tons of news print per day, and during the present year the new mills and extensions coming into operation will increase this capacity to 8,500 tons per day.

It will also be reported that for the calendar year ending December 31, the total exports of pulp and paper amounted to $173,491,635, as compared with $154,555,951 in 1925, an increase for the twelve months of $18,935,684, or over 12 per cent. Of this amount news print scored the largest increase. It definitely passed the $100,000,000 for the first time in history, the total being $114,689,595, as compared with $98,945,337 in 1925.

All branches of the industry are in a flourishing condition, the rayon industry accounting in increasing measure for the revival in the production of bleached sulphite pulp, the exports of which for the year had a value of $1,243,523, as compared with $1,139,445.

New Forestry Research Bureau

A new Forestry Research Bureau has been established in Quebec under the jurisdiction of the Department of Forests and Lands. It is headed by Gustave Piche, chief forestry engineer, and will commence to function on February 1.

Canadian Cellulose Co.

The new subsidiary of the Howard Smith Paper Mills known as the Canadian Cellulose, is about to start operations. The plant is situated adjacent to the Howard Smith Mills at Cornwall, Ontario, and is equipped to produce 50 tons of soda pulp daily; this production can be doubled without any addition to the existing buildings—further equipment only will have to be added.

The Howard Smith Mills will take a portion of the output of this subsidiary and the remainder will be sold on the open market. Incidentally, the new chemical pulp mill will consume poplar wood—a raw material which is less costly than spruce. The company has acquired poplar limits from the Ontario government.

St. Regis Paper Co.

It is announced that the St. Regis Paper Company will commence the erection of its new 400-ton news print mill at Cap Rouge, Que., as soon as the snow flies, with a view to bringing the mill into production during the latter part of 1928.

New Government Policy

Unexpected and highly important developments have occurred in the pulpwood negotiations between the Federal Department of the Interior and the Manitoba Paper Company. These developments mark the inauguration of a new policy by the Department, as well as a new chapter in a controversy which has been raging, in one form or another, for two years.

Hitherto the Department has always declined to sanction guarantees on a cordage basis, and has given guarantees only in square miles of timber limits. This has been owing to the fear that lack of pulpwood might expose the government to action for non-fulfilment of contract.

However, the aerial patrols, sent out during the last two years have proved the pulpwood resources of Manitoba to be so great that the government now feels safe in guaranteeing a large cordage.

As a result, the company's application for an additional 1,800 square miles of pulpwood is dropped; it is discarded and disappears entirely from the scene, and the government now is asked to guarantee to the company six million cords of pulpwood, to include the cordage already possessed by the company in pulpwood berth number one, and in the additional 1,080 square miles granted by the government in 1925.

The Hon. Charles Stewart, Minister of the Interior, is said to regard the proposal very favorably. It may be explained that the natural resources of Manitoba and of the two other prairie provinces are under the control of the Federal Government and not of the provincial authorities.

New Manitoba Paper Plant

The $250,000 coarse paper plant proposed for St. Boniface, near Winnipeg, is now assured by a telegram received by Mayor R. J. Swain from K. Charles Wood of Detroit, president of the Great West Paper Mills, Ltd., who says that the machinery for the mill has been purchased.

New River Works

Notice has been received by the Minister of Lands and Forests at Quebec that the Portneuf Power Company intends to apply for permission to construct a dam, power house and other works on the Ste. Anne de la Parade River at or near St. Alban, Portneuf county; and also that the St. Maurice River Boom and Driving Company, Ltd., of Three Rivers, intends to erect a pier and enlarge its booms on the St. Maurice River at Grande Piles.

New Rayon Company

Announcement is made that the Canadian Rayon Pulp Company, Ltd., of New Westminster, B. C., has been reorganized, and that machinery for the mill at Poplar Island has been purchased in Eastern Canada.

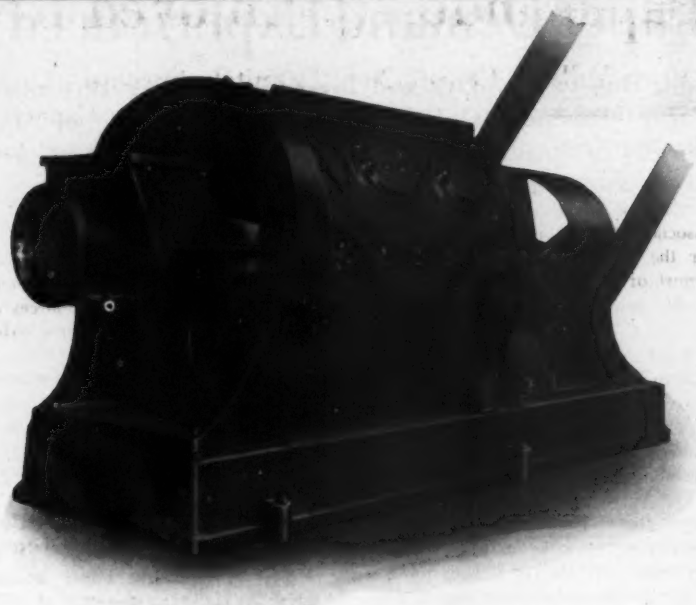
The plant will be installed in two units, first of which will turn out 50 tons of sulphite daily for the manufacture of rayon silk. The second unit will be for the mechanical ground wood process, having a capacity of 20 tons of tissue and wrapping paper pulp daily. Westminster Paper Company and the Sidney Roofing and Paper Company of Victoria will use this produce.

An important alteration in the original scheme is the contemplated purchase from the Dominion government of the 28 acres which comprise the island, instead of leasing.

The company, which is capitalized at $2,825,000, is making an initial bond issue of $750,000, a large part of which has already been subscribed.

President J. J. Herb, of New Westminster, is already head of the Westminster Paper Company, Ltd., and the Pacific Coast Paper Company, Bellingham, Wash.

Other directors are E. J. Riddell, New Westminster, manager of the Westminster Trust Company; Nelson S. Lougheed, New Westminster, president of Abernethy Lougheed Logging Company; Chas. H. Lain, Vancouver, owner of Lain Logging Company, and H. L. Edmonds, New Westminster, director and secretary.



Five thousand tons a day

The Bird Pulp Screens already installed and shipped have the capacity to handle five thousand tons of pulp daily. This includes groundwood, sulphite, sulphate and kraft pulp—all of which are being handled with signal success by the Bird Pulp Screen.

Pulp mill men have been quick to appreciate that Bird Pulp Screen performance and economy of operation are superior to that of old type screens.

May we prepare layouts and estimates for you?

BIRD MACHINE COMPANY
South Walpole Massachusetts

As good for pulp as the Bird Screen is for paper

The Bird Pulp Screen

BIRD MACHINERY

545

Increased Paper Demand Experienced in Chicago

Following Dull Period, Due to Holidays and Inventories, Paper Business Generally Begins to Expand—Fine Paper Merchants Optimistic Regarding Future of Market—Coarse Papers and Krafts in Steady Request—Sulphate Products Also Active

[FROM OUR REGULAR CORRESPONDENT]

CHICAGO, Ill., January 22, 1927.—Dealers in all grades of paper are rejoicing over an unexpected sharp increase in the demand for their products. Following two weeks of slow business, orders have started coming in on all sides, and dealers and representatives have been forced to work overtime in many instances to take care of the trade.

In the fine paper field so steadily has business increased that dealers are beginning to look forward to a demand strong enough to merit an increase in prices following a two year period of almost universal stability at low-price level. General business conditions seem very good and have given a sharply optimistic tone to a market that has been almost entirely lacking in news during the past few months.

Sulphate products, chip board, coated board and other grades are also experiencing an opportunity to make many sales and the dealers that have been clearing their shelves during the inventory just past seem now ready to place their orders, and they are doing so with a confidence and regularity that speaks well for the coming year.

Coarse papers, krafts, etc., are included in the grades that are now in steady demand. Even the fact that it is now time for the dealer to buy, following inventory, does not lessen the belief that business is even better that that condition would warrant. Another theory for the increased business is that the mills have finally disposed of their job lots and odds and ends to the consumers and the consumers have, in turn, disposed of these supplies, and are forced to go to the market at once. According to some paper merchants there is always a tendency on the part of the mills to get together all their job lots and odds and ends and dispose of them at an attractive price, to the buyers.

Paper Board Men Meet

One of the outstanding events of the past week was the January meeting of the Paper Board Industries Association, held at the Palmer House, Chicago, January 18 and 19. While the annual meeting was held November 16 in New York, it is the custom of the association to convene every two months for the purpose of discussing general business conditions. The January meeting was held under the direction of J. P. Brunt, executive vice-president of the Container Corporation of America, and newly elected head of the Paperboard Industries Association.

Chicago Paper Association Label

The Chicago Paper Association is now working on a plan whereby every package leaving the warehouses of member organizations will be labeled with a guarantee that the contents of every package fulfill all specifications as to full size, count and weight. A standard of quantity and quality is to be preserved. The label will be safeguarded by the bond of a nationally known surety company. This new procedure marks another step forward for the progressive Chicago Paper Association.

Correction

Last week the PAPER TRADE JOURNAL stated that the Chicago Paper Association included in its program an "elimination of any possibility of price cutting." This statement has been made in error and should be corrected to state that the Chicago Paper Association is in no way concerned with price fixing of any kind and its only objectives in this relation are the making of better business men of its members, thereby endeavoring to help the men themselves correct the practice of selling merchandise below cost. Since this making of better business men is practically the main objective of the organization it can readily be seen that the statement quoted last week was in error.

Pilcher-Hamilton Employees Entertained

The Pilcher-Hamilton Company, well known Chicago coarse paper dealers, held their annual dinner for employees last Monday evening, January 24, with fifty employees in attendance. A one act comedy, written and staged by employees of the firm, and a real song fest, were the main diversions of the evening.

The feature event of the evening was the distribution of a bonus amounting to 8 per cent of the annual earnings of 1926 to the six members of the well known "Q" Club of the Pilcher-Hamilton organization. The "Q" Club is an organization of salesmen who have made and passed their sales quota during the past year. These men are A. S. Harman, E. J. Herrick, H. D. Reineke, F. L. Leverenz, L. O. Green and W. M. Deem.

Coarse Paper Business Better

Edgar A. Hall, Jr., president of the Chicago Paper Association, and executive of the Pilcher-Hamilton Company, is one of a number of prominent Chicago paper men interested in various lines, to take cognizance of the fact that the quiet months of the new year seem to have now passed, and at this writing he is quoted as saying that "a marked improvement is being shown in the coarse paper field and that there is every reason to believe that this gratifying condition will continue for several months." Mr. Hall remarks that purchase prices are steady and that there is no reason to look for any advance in prices for the next six months. He expects business to expand at a normal rate in direct ratio with the increasing needs of a larger population.

Miscellaneous Trade Notes

Edward C. Burger, well known Chicago representative of the Schmidt and Ault Paper Company, of Ault, Pa., has recently been announced by the Orono Pulp and Paper Company of Bangor, Maine, as their sales representative in both the Chicago and the Milwaukee districts. Mr. Burger has made a splendid success with the Schmidt and Ault line of chip board and bogus papers and he is expected to meet with a continuation of popularity with the well known sulphate specialties that constitute the products of the Orono Pulp and Paper Company.

The Barton Paper Company, located in the Conway Building, Chicago, is making rapid strides as a new concern. Only last November S. G. Barton withdrew from the partnership of long standing known as the Barton-Hobart Company, and went into business for himself. Mr. Barton continued, however, to carry the same lines that he had been intimately associated with and, with his brother, L. R. Barton, as secretary, he has firmly intrenched himself in the handling of a general line of paper. A short time ago Mr. Barton announced the acquisition of two salesmen and now comes out with the news that two more are to be added, that the office sales force is to be increased, and that the entire company is to move into a much larger suite of offices in the same building.

P. H. Bull, Chicago sales manager of the Peshtigo Paper Company, is making an extended business trip in the South and will not return to this city until next week. Mr. Bull is endeavoring to get first hand information on business conditions in that territory and will probably make additional business connections for the firm he represents.

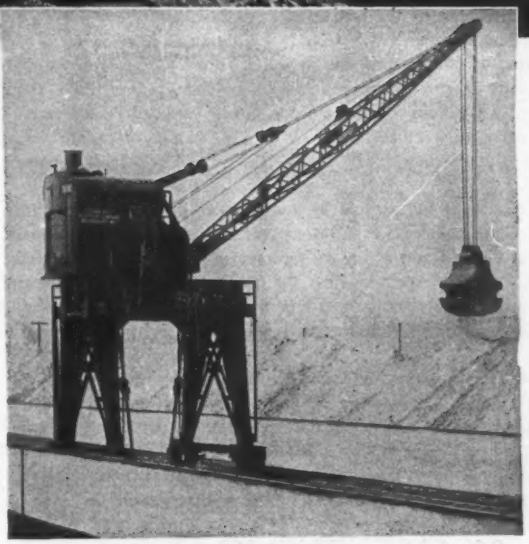
Henry D. Schmidt of the Schmidt and Ault Paper Company, of York, Pa., was in Chicago during the past week.

900 Tons of Sulphur handled hourly

Down along the Gulf at Pier 35, Brownhoist Crane No. 9254—the ninth purchased by a large southern sulphur company—is working night and day to keep abreast with the tremendously increased demand for sulphur.

On the same pier two similar Brownhoists, both five years old, have been handling 600 tons of sulphur an hour and working 22 to 24 hours a day. Crane 9254 increases this dock's capacity to 900 tons hourly or can be used as an auxiliary to the two cranes.

This company's Brownhoists, the oldest of which has been in use over 7 years, range from 10 to 40 tons capacity. All are used for sulphur handling but they would be equally speedy and dependable for handling coal, sand, stone, etc., with bucket, or on hook block or magnet work.



The three Brownhoists at Pier 35 are the same type and size as the crane pictured above in the smaller illustration. They have a capacity of 40 tons and are equipped with 84-cu. ft. Brownhoist link-type buckets.

The top illustration shows two No. 4 Brownhoists of 20 tons capacity handling sulphur with 54-cu. ft. Brownhoist link-type buckets.

Tell us the kind of work you do and we'll be glad to send you information on the right size and type of crane for your job.

The Brown Hoisting Machinery Company, *Cleveland, Ohio*

Branch Offices: New York, Chicago, Pittsburgh, New Orleans and San Francisco

BROWNHOIST

GOOD MATERIAL HANDLING MACHINERY

Kotex Co. Plans Expansion in the East

Rapid Growth of Kimberly-Clark Subsidiary Makes Necessary Development of Additional Manufacturing Units—Wisconsin Interests Led by H. C. Hancke Presumed to Have Taken Over Ownership of Mill of the American Writing Paper Co. at De Pere

[FROM OUR REGULAR CORRESPONDENT]

APPLETON, Wis., January 24, 1927.—Removal of its general accounting offices to Chicago, and development of further manufacturing units in the East are announced by the Kotex Company, Neenah, Wis., subsidiary of the Kimberly-Clark Company. These moves are the result of the exceedingly rapid growth of this industry.

Rumors that a new corporation was to be formed under the laws of the state of Delaware have been afloat for several weeks but these have not been confirmed beyond a statement by company officials that "the advisability of a reorganization of the company has been under contemplation for a considerable period because of the rapid development of the business."

Some time ago the Kotex Company,, until recently known as the Cellucotton Products Company, moved its sales offices to Chicago for the sake of greater marketing convenience. It has found since that greater harmony of operation could be effected by having the general accounting offices there also. This change does not mean that any of the officials will change their residence from Neenah, however.

The cellucotton industry is becoming more diversified each year with an ever wider demand. Many accessories for surgical work have been devised and a line of sanitary products for dental practice also is being brought into the market. Rapid enlargement therefore has come about, including the erection of two large factory buildings of five stories each at Neenah within one year's time.

Any immediate plans for manufacturing expansion probably will be carried out in the East rather than in Wisconsin, the company indicates. An official statement declares that "In furtherance of the general plan of the company's development, it is probable that it will maintain in New York state one or more manufacturing units for the more efficient handling of business throughout the eastern states.

Sale of American Writing Mill at De Pere

Identity of the purchasers of the American Writing Paper Company's mill at De Pere, Wis., are still withheld from public announcement. It is believed, however, that Wisconsin interests led by H. C. Hancke, formerly with the Rhinelander Paper Company, Rhinelander, Wis., have taken over the ownership. This is further substantiated by the fact that Mr. Hancke has moved to De Pere and established his residence there. He states that he is "merely looking over the property" and that "perhaps there might be something more definite later."

There has been organized at De Pere a new corporation called the Nicolat Paper Company, and it is believed this is the company that will operate the mill. Little can be learned, however, because the incorporation papers were filed in the names of Norma Schuelke, Augusta W. Ryall and Frances Anderson, presumed to be merely employees in the offices where the papers were drawn up.

The articles announce that there are 5,000 shares of common stock without par value. It is understood that the mill will be overhauled and improved and placed in full operation.

Program of Nekoosa Edwards Co. in 1926

Progress of the Nekoosa-Edwards Paper Company of Port Edwards and Nekoosa, Wis., during the year 1926 was satisfactory in every respect, according to reports submitted at the annual meeting of stockholders held this week. The gathering was held in connection with a dinner at Port Edwards. All of the directors were re-elected. They are: L. M. Alexander, president and treasurer; J. E. Alexander, L. E. Nash and Judson G. Rosebush, vice presidents; C. A. Jasperson, secretary; L. M. Hanks, Madison, Wis.; G. W. Kibby, Evanston, Ill., and J. B. Nash.

Riley M. Bates Jr. To Be Manager

Riley M. Bates, Jr., is to be manager of the new branch factory of the Bates Valve Bag Company which will start operation in about three weeks at Marinette, Wis. He has arrived there from Chicago and is supervising installation of the machinery. Joseph M. Harnit, general superintendent of the Bates company, and Herman Haberle, who will be the foreman, also are in Marinette.

Three bag making units are to be installed. Machinery for the first one is all on the ground and most of that for the second will be on hand in a day or two. The third will be ready for use in the spring. With the exception of Mr. Bates and Mr. Haberle, all employees are to be hired among Marinette residents.

Kimberly-Clark Co. in Safety Contest

All of the mills of the Kimberly-Clark Company are entered in the international safety contest scheduled by the National Safety Council for the first six months of this year. These include the mills at Kimberly, Neenah and Niagara, Wis., Niagara Falls, N. Y., and Kapuskasing, Canada. The Neenah mill, which won first place in the last contest, again is a contender in Class C, which embraces mills with 200 employees or less.

First Aid Classes

First aid classes have been organized by the Northern Paper Mills and the Fort Howard Paper Company, Green Bay, Wis. The former has 26 enrolled and the latter 21. Instructions are given in co-operation with the Vocational school of that city so that workmen can give needed aid of their own accord, and will not neglect minor wounds that may prove serious. Dr. W. P. Tippet is teaching the Northern's employees.

General News of the Industry

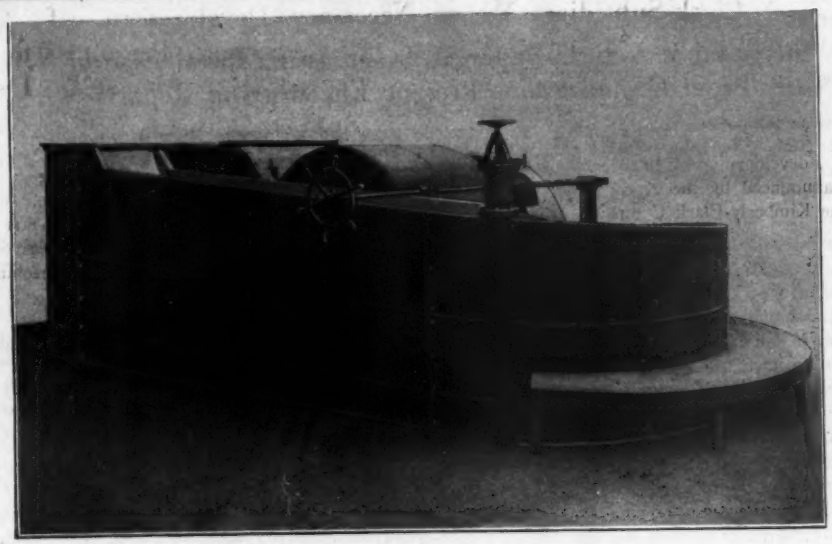
Safety is discussed at monthly meetings of department heads of the Bergstrom Paper Company, Neenah, Wis. At the session this week 19 were present at a supper and discussion. William Neubauer is chairman of the group and Martin Meyer is secretary.

Paper mills at Green Bay, Wis., are the object of a survey by J. G. Noyes, of Appleton, Wis., who has charge of classes in paper manufacture in several night schools of the Fox River Valley. The intention is to develop similar classes in Green Bay, to be held at the Vocational school. It will take several months to complete the educational survey and it is probable that the classes will be started next fall.

Albert G. Wentzel, 34, a foreman at the Kimberly-Clark Company's mill at Kimberly, Wis., died this week at his home in Appleton. Six of his co-workers at the mill acted as pallbearers. Burial was made at his former home at Oshkosh, Wis.

Frank Ronan, employed with a construction crew at the Neenah mill of the Kimberly-Clark Company, Neenah, Wis., was injured in a fall from a scaffold on Wednesday of this week. It is believed he suffered a fracture of the pelvis and will be confined to the hospital for several weeks.

Winter athletic activities are in progress at mills of the Fox River Valley. The Kimberly-Clark Company mill at Kimberly, Wis., has organized a basketball team known as the K. C. Athletics and is playing teams of other mills of the company, and also meeting outside professional teams. The Menasha Printing and Carton Company, Menasha, Wis., has organized a bowling league consisting of three men teams, and is rolling games several evenings a week and on Saturday afternoons.



They Score Again!

In July 1925 The Lincoln Paper Mills, Elkhart, Indiana, ordered the reconstruction of three holland beaters into the Dayton High Speed Type. The Lincoln management expected more and better paper on reduced power. They got what they expected. Consequently we had the privilege of installing still more Dayton equipment in the Lincoln Mill.

Give us the opportunity to submit data on this and many other installations, and we will prove beyond question that Daytons bring the results we claim for them. Write us, or write our New York Office.

The Dayton Beater & Hoist Company

DAYTON, OHIO

Eastern Representatives: E. K. Mansfield & Co., 501 Fifth Avenue, N. Y.

HIGH SPEED

Dayton Beaters

Conditions Improving in Toronto Paper Market

Most Plants Continue to Operate at Capacity, With Orders Booked Ahead for Several Weeks—Production to Be Increased at Kenora Paper Mills Following Installation of New Boiler —Many Paper Organizations Present Encouraging Reports

[FROM OUR REGULAR CORRESPONDENT]

TORONTO, Ont., January 24, 1927.—The paper market continues very good and the prospects for increased business are growing better with each succeeding week. There is a better feeling all around in the trade and, now that inventory period is over, all jobbers are mapping out plans for stimulating and increasing turnover during the coming season. Mills continue to operate at capacity and some of them have orders ahead for several weeks. The annual meetings of the paper industry, which will be held in Montreal this week, will result in the exchange of much valuable information in regard to trade conditions and prospects and closer cooperation between mills and distributors.

In the waste paper market business is very fair. There has been a slight drop in manilas, news and scrap. The rag market is not so encouraging and roofing stock is dull. Cotton rags for book mills are moderately active.

The pulp market is steady and mills are supplying all normal calls but not turning out excess quantities to meet any speculative demand. The whole trend of the pulp business is more toward stability of production and price. Quotations on all lines of paper remain steady and there has been a stiffening of prices on paper bags, which for some time have been selling at cut prices.

Kenora Will Boost Production

The Kenora Paper Mills, Kenora, will, after the new boiler is installed, turn out 250 tons daily which will be an increase of 25 tons. The company has 17 camps in the woods employing about 1,400 men, while five jobbers are also supplying pulpwood and additional quantities are being bought from settlers. There are nearly 500 men engaged in the Kenora Paper Mills. Since the installation of the new First Aid Station, together with a capable staff and whole-hearted cooperation among all departments, the number of men receiving compensation has been reduced by 70 per cent. The number of accidents in the mills has been lessened by 50 per cent and lost hours by 60 per cent. The new department has proved its efficiency from the start. The railway survey of the new line from Kenora to the English river which was started in May last, is being continued and it is expected that construction will begin in the spring. Every mile of the new road will open up new pulpwood fields and districts.

Paper Mills Hold Annual

The annual meetings of the Victoria Paper and Twine Company, Ltd., of Toronto and Montreal; the Garden City Paper Mills, Ltd., of St. Catharines, Ont., and the Canadian Vegetable Parchment Company, Ltd., of Merritton, Ont., were held recently. Encouraging reports were presented on the operations of the past year and the outlook for the coming one is regarded as promising. Sydmer W. Ewing, manager of the Montreal branch, was elected to the board of the Victoria Paper and Twine Company, Ltd., and Richard Carroll, manager of the mills, to the board of the Garden City Paper Mills, Ltd. William H. Howe was elected president of the Garden City Paper Mills, Ltd., and Leo E. Charles, of Toronto, was elected president and managing-director of the Victoria Paper and Twine Company, Ltd., and also president of the Canadian Vegetable Parchment Company, Ltd.

Promotions by Abitibi Co.

Edward Silver, superintendent of the paper mill of the Abitibi Power and Paper Company, Iroquois Falls, Ont., has been appointed general superintendent of the plant with authority over the various departments. Frederick B. Haynes has succeeded Mr. Silver as superintendent of the paper mill. Both of the men promoted have had wide experience in all branches of the paper-making industry and have been a number of years with the Abitibi company.

New Mill Off to Good Start

The new news print mill of the Manitoba Pulp and Paper Company at Pine Falls, Man., recently started operations. With the construction of the new mill a new town has been brought into being and this has been laid out in artistic lines with trees left standing wherever possible. There will be a staff of about 300 employed in the mill and about as many in the various logging camps. There is a large supply of pulpwood on hand and much of this raw material has been secured from farmers and settlers in the surrounding territory who have had it cut for some time pending the starting up of the mill.

Extension of Thunder Bay Co.

The ratepayers of Port Arthur, Ont., by an almost unanimous vote, have confirmed an agreement with the Thunder Bay Paper Company ratifying the sale of 100 acres where the new news print mill of the company is being erected, to the company. The latter will spend several millions in the establishment of the industry, which will have a productive capacity of 400 tons per day. The mill will employ 700 men continuously in addition to the woods force required to provide for the raw material. Work on the structure is already well under way and indications are that the number of men employed will be above the minimum of the agreement.

Water Supply of Mills

The residents of Merritton and Thorold, Ont., and the paper mills in the Niagara district, are confronted with a serious crisis in the matter of an adequate and purified water supply, which must be faced in April next. To emphasize the seriousness of the situation it is only necessary to reiterate what Major Bell of the Department of Railways and Canals, told the deputation to Ottawa on January 7, that the present source of water supply will be absolutely unfit for use, either for domestic or factory purposes, on and after April 15 next. There will be no less than 7,800,000 gallons of muddy water carried daily by suction dredges into a disposal basis, from which it must return into the canal when construction work is resumed in April. With such a municipal water supply, it follows that the complications with the provincial board of health will be serious, while paper mill production will be interfered with. Several propositions to overcome the difficulty have been made.

May Remove Office to Montreal

S. R. Armstrong, general manager of the Mattagami Pulp and Paper Company, Smooth Rock Falls, Ont., who has been spending the past few weeks at his home in Caledonia, N. Y., was in Toronto recently on his way to the mill. When asked whether the absorption of the Mattagami company by the Abitibi Power and Paper Company would result in the office staff of the former being removed from Toronto to Montreal, Mr. Armstrong said that nothing definite had yet been decided. It is learned, however, that the Toronto branch of the company is likely to be closed and all the work connected therewith conducted from the headquarters of the Abitibi company, Montreal.

New Industries Are Kept Busy

The Industrial Commissioner of Belleville, Ont., in a recent report on the industries of that city, states that an output running well up into hundreds of thousands of dollars has marked the

Dilts-

PERFORMANCE
OF
Approved NEW TYPE Beating Engines

ONE USER REPORTS:

"We have run several tests on the 66" x 60" Beater which you recently furnished us. We find it will carry 3850 pounds actual dry weight and circulate at 17.4 feet per minute, consistency 9.57% on 80 to 85 horse power."

"We believe you have one of the best Beaters on the market for fast circulation of stock."

ANOTHER WRITES:

"In the NEW TYPE Beater recently installed we are carrying 50% more kraft beating the stock the same length of time and we do not believe we are using any more power than we are using in our Hollanders."

Write for details of this power saving common sense Beating Engine.

"Your paper is made in your beaters"

Dilts

MACHINE WORKS, Inc. FULTON, N.Y.

EXPORT OFFICE ~15 PARK ROW~ NEW YORK CITY

history of the Carthage Machine Company of Canada, during the past year, which was the first full year of production in the Belleville plant. The Belleville factory bids fair to outstrip in importance the parent company at Carthage, N. Y. One of the new industries, located in Belleville during the year, was the Frontenac Paper Company, which removed from Kingston. The company turns out a large line of cardboard boxes, cartons and similar products which are largely sold to the manufacturers and merchants in Belleville.

Handling Greater Lot of Pulpwood

The Thompson and Heyland Lumber Company, Toronto, during the past season shipped no less than 5,000 cars and eleven boatloads of pulpwood to various points in Ontario, New York, Pennsylvania and other States. The car shipments were made along the line of the T. & N. O. and Transcontinental Railways, while the cargoes were loaded at the mouth of the French River. About 100,000 cords were handled in all. The pulpwood business is quite active at the present time and during the coming season the Thompson and Heyland Lumber Company will handle fully 25 per cent more than they did last season, the greater part of which has been contracted for. The wood is now being drawn out to the tracks and shipped to various points, hauling conditions being ideal.

Some Publicity of Good Quality

The Howard Smith Paper Mills, Ltd., Montreal and Toronto, have issued a very handsome portfolio, entitled, "Character as Reflected in Business Stationery." The cover is Dominion, ripple finish, double thick, and an introductory reference appears on the fly sheet of Carlyle Japan, India plate finish. The specimens of letter heads in the folio are taken from actual jobs covering the various processes of printing, including die-stamping, three-color letter press and lithographing.

Fred W. Halls Paper Company, of Toronto, recently sent out to their friends a handsome metal and paper calendar. The calendar is a work of art and the embossed trade mark of the firm appears in gilt and red on a black background. The color combinations are exceedingly effective and Mr. Halls has received many congratulations on the attractive and permanent character of his calendar.

Notes and Jottings of the Industry

T. A. Weldon, vice-president of the Provincial Paper Mills, Ltd., Toronto, passed his 73rd birthday lately and received the congratulations of scores of friends in the industry with which he has been associated for many years. Mr. Weldon comes of a long-lived family, his forbears in many instances reaching the century mark and it looks as if he is good for at least another quarter of a century.

E. W. Backus was in Fort Frances, Ont., recently, on business, and in an interview stated that he was well pleased with the progress on the new news print mill which will be one of the finest in the world. It is expected that the new plant will be running in March or April.

The sale of the jack pine in two townships, Bennewiss and Somme, on the C. N. R. Sudbury-Port Arthur line, took place lately, being conducted by the Department of Lands and Forests. The successful tenderer was the Poupore Lumber Company, whose mills are at Gogama. The acquisition of the wood on these townships will add several years to the life of the industry. The Government receives a price well above its upset, the total being about 80 cents per M.

The new 50-ton strawboard plant of the Hinde & Dauch Paper Company, of Canada, which has been erected at Trenton, Ont., is expected to begin production about March 1. Wheat and rye straw will be used in the manufacture of strawboard.

The establishment of a pulp and paper plant on the West Coast of Vancouver Island is being rumored in the Port Alberni district. Although nothing definite has been divulged by the promoters, it is reported that Port Alberni and Clayoquot are being considered as possible locations.

The Department of Lands and Forests of Ontario has sold 11½ square miles of timber in Paxton township to Wilson Brothers, of Sundridge. The area includes pulpwood and hard and soft saw lumber.

W. H. Russell, of the Russell Timber Company, large pulpwood exporter, who was a member of the Public Utilities Commission, of Port Arthur, Ont., was returned by acclamation recently at the municipal elections.

Whitelaw, Dickinson & Co., Ltd., have been incorporated with a capital stock of $5,000, and headquarters in Toronto, to carry on the business as stationers, printers, bookbinders, etc.

Frank T. Thorne, of Price Bros. & Co., Ltd., Quebec, accompanied by Marshall Ball, mill superintendent, was in Toronto recently on business.

Buntin, Reid & Co., Toronto, report that the demand for their dry mats is increasing very rapidly and that many newspapers are using them in place of wet mats. The dry mats are made in England, and sold in Canada by Buntin, Reid & Co.

The new paper machine which has been installed in the Port Arthur division of the Provincial Paper Mills was tuned up during the past few days and will be turning out paper by February 1. The output of the machine will be principally a superior grade of half-tone news.

C. T. Wright Leaves Champion Paper Corp.

[FROM OUR REGULAR CORRESPONDENT]

CARTHAGE, N. Y., January 25, 1927.—C. T. Wright, resident manager of the Champion Paper corporation for several years, has resigned his position to become effective as soon as the company can dispense with his services. The change in management is brought about it is reported through the ultimate merger of the Champion mill with the St. Regis group. When the change becomes effective at some later date all the records and financial matters will be handled from the New York office, and the position of resident manager in Carthage will be abandoned.

Mr. Wright came to Carthage from Deferiet 21 years ago, where he had for some time been connected with the Deferiet mill. Prior to that time he had resided in Watertown. During the first year of his residence in Carthage he was associated with the Ryther Pringle company, after which he obtained a position with the Champion Paper Company and for several years was associated with the late H. Cadwell, who was general manager of the mill at that time. After Mr. Cadwell disposed of his interest in the Champion mill, Mr. Wright was promoted to resident manager, which position he has capably filled with credit to himself and to the company.

Although Mr. Wright has been offered a lucrative position outside of Carthage, he has not made any definite plans for the future.

Negotiating To Sell De Pere Mill

[FROM OUR REGULAR CORRESPONDENT]

HOLYOKE, Mass., January 25, 1927.—Negotiations are in progress by President Sidney L. Willson of the American Writing Paper Company for the sale of the Shattuck Babcock mill at De Pere, Wis., in line with the announced policy of President Willson to dispose of the most of the outside mills. The Shattuck & Babcock mill is a three machine mill making about 15 tons daily of fine writing papers.

If this sale is consummated, and there are high hopes of its consummation soon, the plan is to transfer as much of the business possible to the local divisions of the Company. Paper manufactured there is of a high type and includes as well as writings, loft and machine dried bond papers and ledgers. Much of it was used to supply the consumers in the coast territory of the company.

REXPULP COMPANY INCORPORATED

MERLE P. CHAPLIN, INVENTOR and CHIEF ENGINEER

Formerly Engineering Department of Bell Telephone Laboratories, Inc., subsidiary of American Telephone & Telegraph Co., and Western Electric Co.

MANUFACTURERS OF

NEW PROCESS

IMPROVED PULP MOULDING MACHINERY

PATENTS APPLIED FOR IN UNITED STATES and FOREIGN COUNTRIES

WANTED FACTORY BUILDING

WANTED—One story factory building approximately 60,000 square feet, preferable size 125 ft. x 400 ft., also two story section 60 ft. x 125 ft.

Building to be used for moulded pulp products plant.

Location to be adjacent to or within easy reach of spruce ground wood pulp supply of 25 to 65 tons per day.

Must have railroad siding and railroad connections for most direct shipment to all parts of United States and Canada, particularly to Atlantic Seaboard.

Must have land adjacent to building to allow for expansion to 200,000 square feet or more.

In reply give full details on all above items, furnish drawings and complete information of building available and also give full information as to power rates, labor conditions, local taxes, other industries located nearby, etc.

Building to be leased with privilege of purchasing within stipulated number of years.

Address reply to Box 9908, Paper Trade Journal.

REXPULP MOULDED PULPWARE

Michigan Paper Mills Hold Annual Elections

Paper Concerns Pretty Generally Report Good Business During 1926 and Look Forward To Even Greater Activity During the Ensuing Year—Kalamazoo Vegetable Parchment Co. Holds Health Week At Parchment for the Mutual Benefit of Its Employees

[FROM OUR REGULAR CORRESPONDENT]

KALAMAZOO, Mich., January 24, 1927.—The Standard Paper Company and Sutherland Paper Company, manufacturers of cartons, whose combined output runs into hundreds of millions of small board containers annually, held their annual meetings Monday. Both concerns were able to show satisfactory returns for the past twelve months, while the outlook for the future is particularly gratifying in each instance.

"We are starting the year in the best condition in our history," said F. W. Sutherland, secretary of the Sutherland Paper Company. "January is usually counted as a doubtful month, but the present January finds us operating at 100 per cent and pressed to keep up with orders."

J. F. Byrne, general manager of the Standard Paper Company, indicated that the outlook for 1927 is generally most encouraging. It was only recently that B. C. Dickinson, president of the Standard, said that he predicted much better business for 1927 than during the past year, adding "we have no right to enter any complaints regarding 1926."

Both companies are in splendid financial condition, while their respective plants have been maintained at the highest state of efficiency. No extensive additions are scheduled for at least the first half of the current year. The stockholders and directors meetings were as result rather perfunctory and of a routine nature.

Standard Paper Co. Elects Officers

The Standard Paper Company election resulted as follows: Directors: J. F. Byrne, A. L. Clark, E. A. Dunwell, W. J. Lawrence, James H. Dewing, B. C. Dickinson, H. S. Humphrey and C. H. Stearns. The officers, all holdovers, are: President, B. C. Dickinson; vice president, James H. Dewing; secretary-treasurer, A. L. Clark; assistant secretary, J. T. Bachelder; general manager, J. F. Byrne.

Sutherland Paper Co. Re-elects Directors

Sutherland Paper Company stockholders re-elected all directors as follows: A. M. Meincke, Chicago; F. M. Hodge, F. B. Eilers, W. L. Otis, E. W. Chase, Fred A. Appeldoorn, F. W. Sutherland, L. W. Sutherland, Kalamazoo, and O. F. Miller, Detroit. The holdover officers are: President, L. W. Sutherland; vice president, O. F. Miller; secretary, F. W. Sutherland; treasurer, W. L. Otis.

Hawthorne Paper Co.'s New Officers

The old line up at the Hawthorne Paper Company has been materially changed as result of the selection of George H. Gerpheide to succeed the late A. H. Dwight as president of the company. While C. H. Kleinstuck has been retained as vice president, and S. B. Monroe as treasurer, E. W. Chase succeeds Fred C. Clark as secretary. George H. Gerpheide, F. M. Hodge and A. E. Curtenius have been added to the directorate and with J. H. Dewing, S. B. Monroe, E. W. Chase and C. H. Kleinstuck, constitute the board.

Rex Paper Co. Holds Annual Meeting

The annual meeting of the Rex Paper Company was devoted exclusively to routine business. All directors and officers were re-elected as follows: Directors, Merrill B. King, W. J. Lawrence, Clarence L. Harter, Harry C. Bradford, Roy V. McCulfor, Kalamazoo; W. G. Irwin, Columbus, Ind., and Harry H. Creamer. Minneapolis; president, Merrill B. King; vice president, Harry H. Creamer; secretary, Harry C. Bradford; treasurer, Roy V. McCulfor; general superintendent, Clarence L. Harter. The company has been very busy during 1926 and opens 1927 with prospects for a continuance of prosperity.

Health Week at Parchment

Health week at Parchment, designed for the mutual benefit of employees of the Kalamazoo Vegetable Parchment Company and residents of Parchment community as well, closed Friday evening with an address by Dr. Hugh Cabot, member of the medical staff at the University of Michigan.

Mr. Sampson from the National Health League spoke Thursday evening on foods, proper preparation and nutrition. This talk is to be followed up the week of January 24 to 29 with a cooking school each afternoon in the community house. These classes are open to the public.

At the past week's general meeting for superintendents and foremen, Jacob Kindleberger gave a talk on the official's responsibility for the health of his workers. He also talked later in the week on "Health Hints from the Bible."

Miss Hazel Irey, nurse at the K. V. P. plant, has been instructed to interview every employee in the plant and become well acquainted with their mental and physical conditions.

National President Rooney to Be Present

Fred Rooney, national president of the American Pulp and Paper Mill Superintendents Association, will be present Thursday evening at the January dinner session of the Michigan division. A large attendance to greet the chief is expected.

R. A. Hayward, general manager of the Kalamazoo Vegetable Parchment Company, will talk on "Paper Mill Problems."

Beckett Paper Association Meets

DAYTON, Ohio, January 24, 1927.—More than 250 members of the Beckett Paper Association assembled at the eighth annual dinner and dance at the Elks Temple in Hamilton last Tuesday night.

After a splendid dinner, the members of the Association who are employees of the Beckett Paper Company, founded by the late Thomas Beckett, conducted a business meeting.

Minor Beckett, president of the paper company, submitted an interesting report, which should prove of value to similar concerns throughout the country as tending to demonstrate co-operative work. He explained that the members now carry $425,000 worth of insurance in the Association which affords good protection, as has been demonstrated by actual experience.

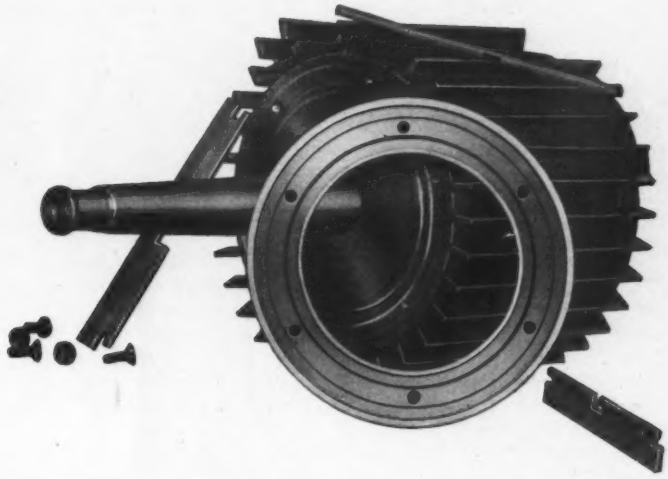
In his report, Mr. Beckett stated that the Association paid $3,500 to members last year in sick benefits and that $4,000 had been paid in death claims to relatives of two employees whose demise occurred in 1926.

Then followed the report of A. J. Wildman that Minor Beckett, Frank Gluhm, Homer H. Latimer, Jacob Brill and Lee Morris had been elected directors for the coming year.

Arnold-Roberts To Be Hammermill Agent

NEW HAVEN, Conn., January 25, 1927.—The Hammermill Paper Company of Erie, Pa., announces the appointment of the Arnold-Roberts Company, successor to the New Haven Paper Company, Inc., of this city, as a Hammermill agent.

Valley Bandless Roll



Save Time and Labor in the Beater Room

Equip Your Beaters with this Modern Roll

There are very definite reasons why Valley Bandless Rolls save time and labor in the beater room, are more efficient and produce paper more economically. The features of accessibility, safety, durability and saving time, that were so quickly recognized in the quick detachable automobile rim, are the same features that have caused paper manufacturers to adopt Valley Bandless Rolls as efficient money-saving equipment.

The Valley Bandless Roll is constructed so that one, ten, any or all of the bars may be removed without taking the roll from the tub. The bandless ring and milled slots prevent fly bars from working loose. The time and labor of refilling roll is reduced 50%. This roll can be easily dismantled without heating, thus eliminating danger of cracking and ruining entire roll. Moreover, flybars are standardized, both as to punching and hand, for each width of face. This advantage is valuable to the mill operating a large battery of beaters. Write today for more information about Valley Bandless Rolls.

The Valley Bandless Roll is so much easier to use and so much time is saved in refilling that the cost of installation is soon more than equalled by time and labor saved. We will be glad to furnish you full particulars.

200
IN OPERATION

VALLEY IRON WORKS CO.

APPLETON, WISCONSIN

New York Office: 350 Madison Ave.

Los Angeles Paper Demand Seasonably Active

Decidedly Better Feeling Among Paper Men Than Existed at This Time Last Year and 1927 Is Expected To See a Number of Improvements Developed in the Industry—Sodium Products Corp. Rebuilds Plant at Camp Verde, Yavapai County, Arizona

LOS ANGELES, Cal., January 21, 1927.—The volume of business for the first two weeks of the year shows a decided falling from the volume during the first two weeks of December. However, this is not to be wondered at as during most of December there was a very active demand due to the holiday trade enjoyed by the stores in Southern California, while with the holidays past, and with so many business men engaged in their annual inventory, it is but natural that the demand for paper should fall off. It is expected the demand will recover tone within the next few days and that thereafter there will be no occasion to complain of any recession in the demand, seasonal or otherwise.

Hand to Mouth Buying

The last qualification to the statement is made advisedly. In recent issues of the PAPER TRADE JOURNAL your correspondent has instanced the fact that there was a good deal of hand to mouth buying from certain factors among the large consumers of paper stocks. It hardly is to be expected that what characterized the trade during a considerable portion of last year will change within a week and these factors be induced to go back to their old time methods of buying. The fact is that they will not. Hand to mouth buying is likely to become a permanent characteristic of the paper trade, at least as far as the buying of certain factors among the consumers is concerned, hence one reason for certain seasonal recessions in trade will have been partially wiped out at least and the total volume will approach a more equable stage as week follows week. Certain of the factors in the paper trades welcome this condition while others deprecate it. Certainly it presents certain advantages and certain disadvantages and perhaps no one is wise enough to say at this time which one of these predominates.

Decidedly Better Feeling

But, however conditions may affect the trade in general as respects volume, it must be asserted that there is among the paper men in Los Angeles a decidedly better feeling than existed at this time last year. This is apparent to the most casual of observers and has been remarked upon to your correspondent a number of times during the last few days. In other words, there is a more confident tinge to whatever anyone connected with the paper trade has to say about the prospects for the future and it is evident that everyone in the industry is looking forward to doing business during the next twelve month with far more confidence in the stability of the industry and in the maintenance of prices and in the observance of business ethics than has been observable in this part of the country for a long, long time back.

Stiffening in Prices

For one thing there is a decidedly stiffer tone to prices. There have been no sensational advances, but there have been some slight advances which are explained to be more in the nature of readjustments to existing conditions in the industry here and elsewhere than as being indicative of any decided trend. Nevertheless, there appears to be a tendency all along the line to stiffen prices.

Sodium Products Corp. Rebuilds Plant

Word comes from Camp Verde, Yavapai county, Arizona, that the Sodium Products Corporation, formerly the Western Chemical Company, has practically rebuilt its plant and that now it is shipping from sixty to seventy-five tons of sodium sulphate to paper mills in the South and Middle States. The original company was insufficiently capitalized and had an inefficient plant for handling the ore mined. Some time ago the Sodium Products Corporation took hold of the company, refinanced and reorganized it and followed this by completely revamping the plant. Practically the entire output of the company has been contracted for for fully a year in advance. What makes this announcement of great interest to the paper industry is the fact that the Camp Verde deposit is the largest single deposit of sodium sulphate anywhere in the country and there appears to be an inexhaustible amount of it in sight. Furthermore, the sulphate, after it has been washed and roasted at the plant is between 95 and 99 percent chemically pure. Superintendent Campbell, of the plant, made a trip recently throughout the South and found a demand from the paper mills in that section which will be in excess of the capacity of the plant to supply until another unit shall have been added.

L. L. Leadbetter Returns from Europe

L. L. Leadbetter, manager of the Los Angeles and the Vancouver plants of the California-Oregon Paper Mills, returned to Los Angeles during the first week in January from a four months' tour of Europe. Most of this time was spent inspecting the paper mills of Sweden and Norway and in visiting the paper manufacturing machinery plants in Germany. Mr. Leadbetter says that he has not been back in this country long enough to have gotten into touch with business affairs, but he says his subordinates report to him that affairs of the company he manages have been going along very prosperously. Early next month the company will hold its annual meeting at Vancouver at which time the officers and directors for the ensuing year will be chosen.

Shipping Paper East

A considerable quantity of the lighter grades of wrapping paper is being shipped from the mills in the northwest to the New York market. Up to the present time the tonnage has not been sufficiently large to make much if any difference in the market, but the paper men out on the Pacific Coast say that enough has been shipped to make some of the Eastern mills sit up and take notice. This is evidenced by the rumors that are going around of projected mills to be built in the northeast and to be financed by Eastern paper men.

Some time ago your correspondent predicted that one of these days the far west would retaliate upon the east by shipping some of the Pacific Coast product to the eastern markets. This would tell the East that the time had gone by when the far West could be used as a dumping ground for excess stock from Eastern and Mid-Western mills. In other words, it would be a most effective turning of the tables.

Collections Show Improvement

It is too soon after the beginning of the year to get any authentic information about the condition of collections. Late in 1926 some of the paper houses reported them rather slow, but apparently there has been some improvement since none is disposed to cavil at the way money is coming in at the present time.

Speculation Regarding 1000 Sheet Count

The paper jobbers of the far West are watching with considerable interest the speculations regarding an universal adoption of the 1,000 sheet count. Up to the present time some of them have been rather skeptical about the plan but since its adoption by the New England paper men some of the Los Angeles jobbers think maybe it will become general in time. There appears to be no unanimity of opinion regarding the merits of the suggestion, but most admit that if it could become the rule of the industry several advantages would result. However, it is too early to say what the far Western paper men will conclude to do about it.

Now in Its 50th Year of Service to Industry

1877 The small workshop shown above represented the Jeffrey Manufacturing Company half a century ago.

WHEREVER coal is mined or converted into steam and electricity—

Wherever rock and clay and sand are turned into brick and cement—

Wherever logs are ground into pulp, and pulp rolled into newsprint—

Wherever manufactured products are carried from process to process—

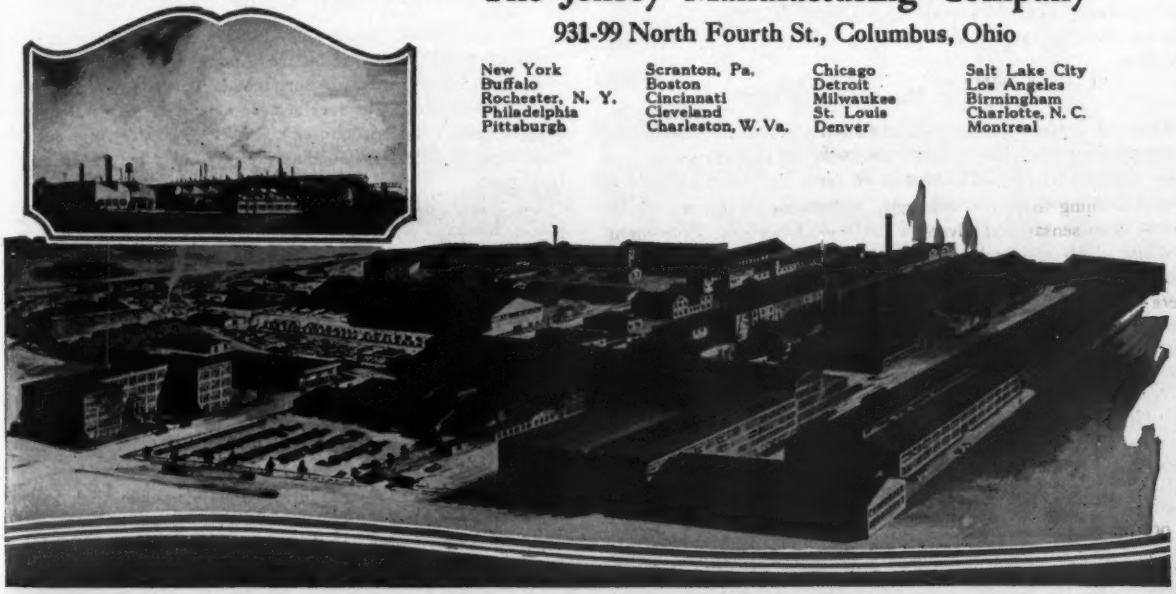
There Jeffrey Material Handling Equipment carries an important part of the load.

In fact, during the half century since its organization in 1877, the Jeffrey Manufacturing Company has solved material handling problems for every basic industry.

In the future new problems will arise, and for these also Jeffrey Engineers will find practical solutions.

The name JEFFREY, like the *sterling* stamp on silver, has come to mean "the guarantee of a trustworthy product."

1927 The present plant as shown below together with its malleable foundry, in the panel, covers more than 60 acres of ground.



The Jeffrey Manufacturing Company

931-99 North Fourth St., Columbus, Ohio

New York	Scranton, Pa.	Chicago	Salt Lake City
Buffalo	Boston	Detroit	Los Angeles
Rochester, N. Y.	Cincinnati	Milwaukee	Birmingham
Philadelphia	Cleveland	St. Louis	Charlotte, N. C.
Pittsburgh	Charleston, W. Va.	Denver	Montreal

C. H. Wood 50 Years With E. Butterworth & Co

[FROM OUR REGULAR CORRESPONDENT]

BOSTON, Mass., January 24, 1927.—From office boy to president of the company, and from all reports, dean of the paper trade in active service, is the record of Charles H. Wood, of E. Butterworth & Co., Inc., who will round out in February 50 years of work well done. Mr. Wood, who is personally of a modest nature, outlined the history of his company and was willing to talk freely of its progress and of matters in the paper industry. Half a century ago the firm was Butterworth & Smalley, located at 12 India street. From there they removed to 58 Federal street, the site of the old First National Bank Building, later to 160 Congress street, finally going to 136 Federal street, where their present office is. From Butterworth & Smalley the name was changed to Butterworth & Griffiths. This firm was succeeded by Charles A. Cheney,

CHARLES H. WOOD

but financed by the Butterworth interests. After the death of Mr. Cheney in 1895 the style of the concern was changed to Edwin Butterworth & Co. Mr. Wood was then made Boston manager and continued in that capacity until August 31, 1921, when he was chosen president and Lewis Jennings treasurer of the new corporation.

Founded in Manchester in 1838

The old house of Butterworth was founded in Manchester, England, in 1838. The original members of the firm who were alive during Mr. Wood's connection with the house have now passed away with the exception of William F. Dodge, who is the senior member of Edwin Butterworth & Co., Ltd., Manchester, England. Mr. Dodge is not active at present, owing to illness. Edgar Smalley, of the parent corporation, who is now the acting head, is well known here. He makes annual visits to this side and looks forward to these visits with pleasure. Mr. Wood has considerable pride in being with one house for 50 years. Recalling some of the prominent features of his half century in the trade, he remarked that "while the original house of Butterworth did a very large business, principally in old rags, it has changed so that the chief activity is now concerned with bagging, more particularly gunny bagging. A strange feature of the gunny trade is that that material is not used for paper making now, while in the '70's and '80's it was wholly used for paper. This stock is now shredded for the remanufacture of gunny cloth to be employed in covering cotton bales. Rags that were used wholly for paper-making in the early days are also now shredded for conversion into wiping waste by cotton waste machiners. Animal sizing entirely utilized in the early days for sizing fine writing papers is now employed rather extensively for the manufacture of gelatine and also for glue stock. The consumption of rags for book paper has largely passed out of the picture, as this paper is manufactured principally from pulp.

Writing Mills Making Pulp Papers

"The trouble with the rag trade today is that the writing mills are making pulp papers because the qualities of various grades of old rags have run down, but eventually they will come back. During the high prices of rags, the price of wiping rags went up. All grades of cotton waste were high due to the high price of cotton. It is felt that when wiping waste is selling at a lower price the wiping rags will be bought for paper purposes again and will not be sorted out and sold separately as wiping rags."

Mr. Wood has seen many ups and downs of the trade and fluctuations of the market, and compared the methods now with those of other times. "It is very different now from what it was," he commented, "because the policy now is more speculative. Back in the '70s the buying was done by the principals of the paper mills who came personally and purchased their stock on the market. Of late years the mills have had their purchasing agents in the market. In former days the margins of profit were close, but stable.

Rags Scarce During Cholera Scare

"I can recall the cholera scares when rags were embargoed on account of that disease in Europe. Back in the '70's the house of Butterworth imported several cargoes of Egyptian rags direct from Egypt in sailing vessels. A large portion of these rags was sold to S. D. Warren & Co. and shipped to the Cumberland Mills. Another buyer of Egyptian rags was Richards & Co., of Gardiner, Maine. In those days book papers were made principally of rags."

Despite his 50 years of active service in the paper trade with one house, Mr. Wood remains young and alert. He attributes his excellent physical condition and cheerful philosophy of life to outdoor and indoor sports. He is an enthusiastic golf player. He also enjoys billiards and frequently participates in bowling at the Boston City Club, of which he is a member.

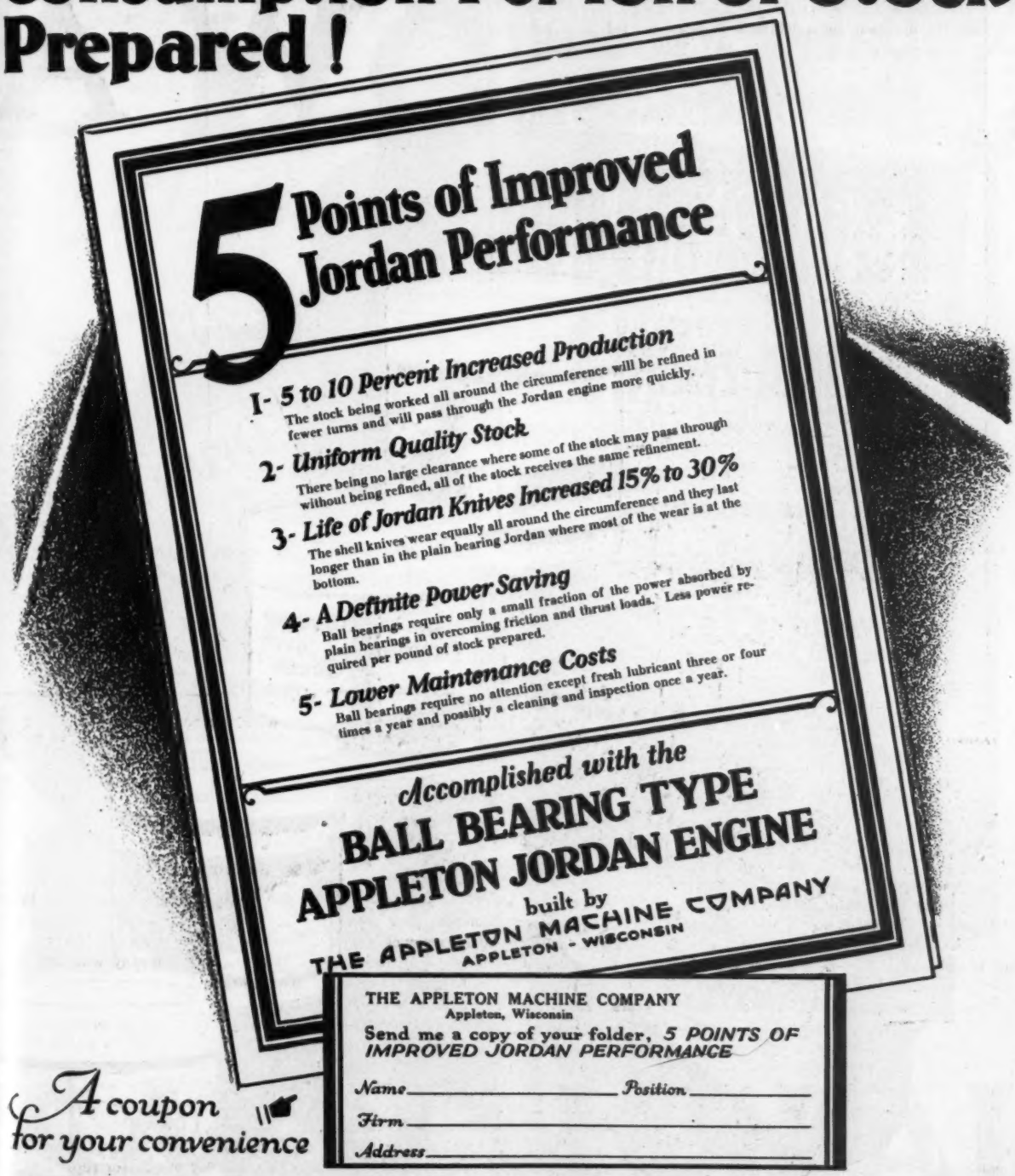
$40,000 Counter Claim In Suit for $787

NORWICH, Conn., January 24, 1927—Trial in a suit involving a claim of $1,000 damages by the American Electric Service and Maintenance Company of Springfield, Mass., against Frank W Browning of Montville, receiver of the Uncas Paper Board Company, Norwich, and a counter claim of $40,000 by the defendant, was begun in the superior court here Tuesday before Judge Allyn L. Brown.

The Springfield firm bases its claim on an alleged debt of $787.50 incurred a year and a half ago by the Uncas Paper Board Company, for repairs and rewindings to two electric motors of 60 horsepower each. The paper board company claims that the motors were turned over to the service company with orders to install new windings to increase the horsepower from 60 to 90 and the revolutions per minute from 720 to 900. According to the defendant company, this work was not done properly.

The defendant company counterclaims $40,000 in losses alleged to have been incurred by the failure of the motors to operate at the designated speed and power. The itemized losses are $5,000 for changes made to the plant; a loss of $2 per ton on 15,000 tons of paper board during suspended operation, and $550 paid to the Springfield company for repairs to the motors. The defendant party denies that it has failed to pay for repairs to the motors.

Now You Can Get More Uniform Stock Refinement with Less Power Consumption Per Ton of Stock Prepared!


5 Points of Improved Jordan Performance
1- 5 to 10 Percent Increased Production
The stock being worked all around the circumference will be refined in fewer turns and will pass through the Jordan engine more quickly.
2- Uniform Quality Stock
There being no large clearance where some of the stock may pass through without being refined, all of the stock receives the same refinement.
3- Life of Jordan Knives Increased 15% to 30%
The shell knives wear equally all around the circumference and they last longer than in the plain bearing Jordan where most of the wear is at the bottom.
4- A Definite Power Saving
Ball bearings require only a small fraction of the power absorbed by plain bearings in overcoming friction and thrust loads. Less power required per pound of stock prepared.
5- Lower Maintenance Costs
Ball bearings require no attention except fresh lubricant three or four times a year and possibly a cleaning and inspection once a year.
Accomplished with the
BALL BEARING TYPE
APPLETON JORDAN ENGINE
built by
THE APPLETON MACHINE COMPANY
APPLETON - WISCONSIN

A coupon for your convenience

THE APPLETON MACHINE COMPANY
Appleton, Wisconsin

Send me a copy of your folder, *5 POINTS OF IMPROVED JORDAN PERFORMANCE*

*Name*_____ *Position*_____

*Firm*_____

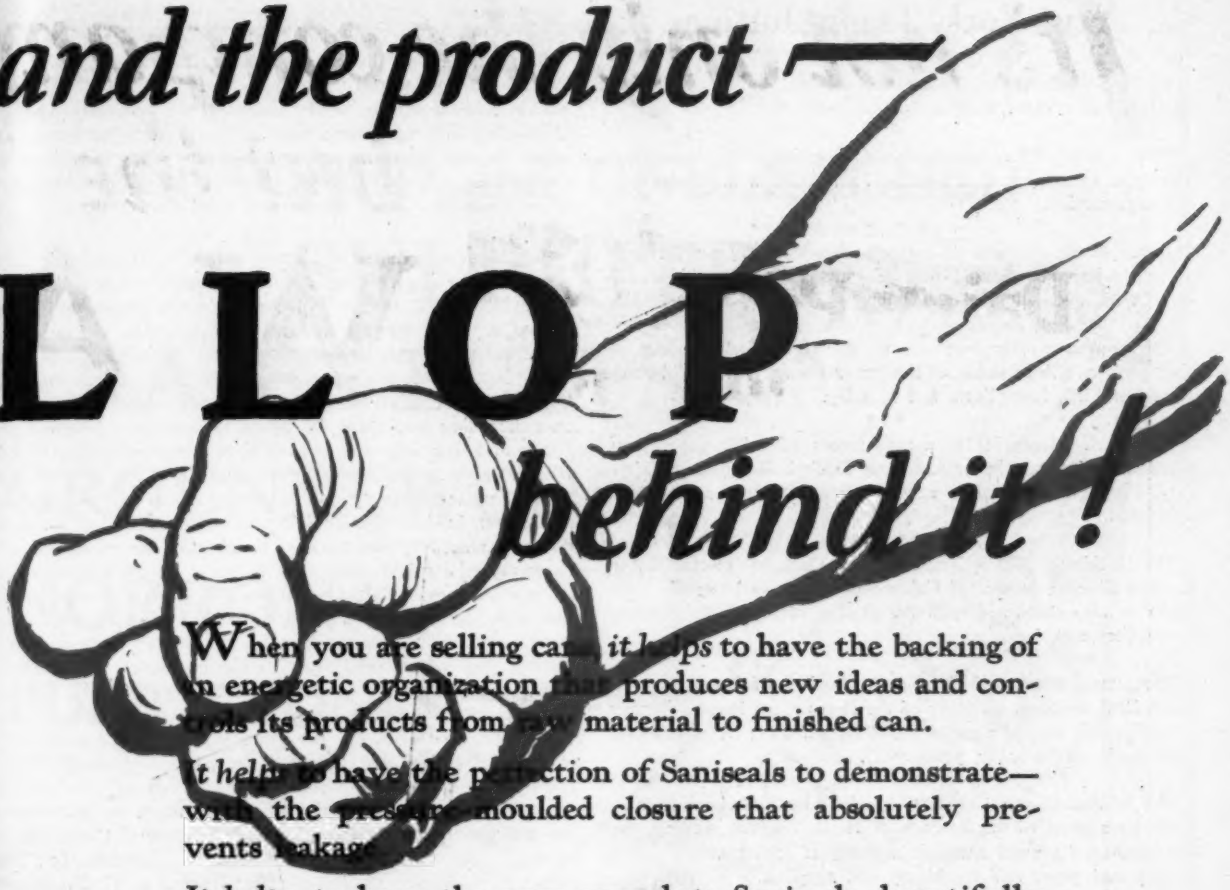
*Address*_____

It's not only the company—a but the WA

...y—and the product—

...ALLOP

...behind it!



When you are selling can, *it helps* to have the backing of an energetic organization that produces new ideas and controls its products from raw material to finished can.

It helps to have the perfection of Saniseals to demonstrate—with the pressure-moulded closure that absolutely prevents leakage.

It helps to have the new convolute Saniseals, beautifully printed with attractive designs for large users.

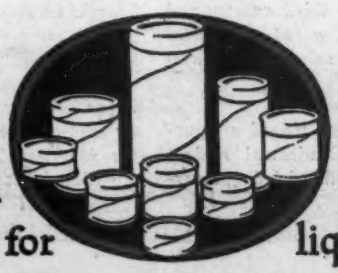
It helps to have full-page advertising appear every month in leading publications that are read by men who buy in quantity.

Both the spiral and the new printed (convolute) Saniseals offer possibilities that jobbers have been quick to see. A few additional connections are now desired, in certain territories. Inquiries invited.

SMITH-LEWIS FIBRE CAN CORPORATION
757 Bostwick St., Lowville, N. Y.

New York	Boston	Cincinnati	Baltimore
110 East 42nd St.	201 Devonshire St.	Union Trust Bldg.	Garrett Building

SANI SEAL



Sanitary fibre containers for liquid, moist or dry products

New York Trade Jottings

Clifford Wells, general manager of Bennett's, Ltd., of Chambly, Quebec, was a New York visitor last week.

* * *

F. C. Clark, of the East Hartford Manufacturing Company, of Burnside, Conn., has been visiting New York in the interests of his organization.

* * *

James Brash, manager of the pulp department of the Nekoosa-Edwards Paper Company, Inc., of Port Edwards, Wis., was in New York over the week-end.

* * *

The regular weekly luncheon of the New York Division of the Salesmen's Association of the Paper Industry, was held at the Canadian Club, New York, last Monday.

* * *

The Park Tissue Mills, manufacturers of toilet paper, have taken larger quarters in the American Chicle Building, Long Island City, New York, and their new telephone numbers are Stillwell 4953, 4954.

* * *

The Mathieson Alkali Company, New York, has elected Robert Stone a director, to succeed Galen Stone, who died recently. Mr. Stone is also connected with the Boston office of the Hayden-Stone Company, bankers.

* * *

The annual dinner of the Kansas Society of New York, of which R. S. Kellogg, secretary of the News Print Service Bureau, is president, is to take place at the Canadian Club, Belmont Hotel, New York, on Saturday, January 29.

* * *

The Warren-Charta Corporation, of 51 East 42nd street, New York, have acquired the interests of H. B. Wadsworth, Inc., and will conduct a general domestic and export business, specializing in pulp and paper mill machinery and supplies.

* * *

In order to give their customary service to users of "The Heco Lines," Harry Elias & Co., paper and twine specialists, have had to buy their own truck, and add another warehouse at 13 Seventh street. They now occupy stores at 13-19 and 21 Seventh street, New York. To grow "Slow but Sure" is their motto.

* * *

R. S. Kellogg, secretary of the News Print Service Bureau, with offices in the Canadian Pacific Building, New York, presided over a meeting of the Trade Association Executives in New York City, on Tuesday last, at the Hotel Astor, New York, when the subject discussed was "Taking Statistics Out of Cold Storage."

* * *

Henry Pfaltz has resigned as president of Pfaltz & Bauer, Inc., specialists in indidustrial chemicals, this city, and has disposed of his stock interest in the company to Frank M. Bauer. Officers of the company have been elected as follows:—President, Frank M. Bauer; vice-president, Kurt Walwer; assistant treasurer, B. O. Hoffman; secretary, N. L. Fremed.

* * *

Texas Gulf Sulphur has established a new high record for the split-up shares. Earnings of the corporation in December reached a new high monthly record of about $1,050,000, it is estimated. For the last quarter of 1926 the company earned approximately $3,000,000, as compared with $2,531,468 in the third quarter and $3,790,542 in the first half of last year. This would make total earnings for the full year about $9,325,000, as compared with $5,689,241 in 1925.

* * *

The Merchants' Association of New York has lodged a vigorous protest with the United Kingdom and Continental Freight Conferences against the practice of stamping bills of lading covering shipments in fiberboard, veneer wood containers with the clause: "Packages insufficient in strength—insufficiently protected—it is agreed that the shipper assumes all risk of loss and of damages not occasioned by negligence of the carrier." The association holds that many of the shipments are adequately protected if handled with reasonable care, and it protests particularly because foreign shipments moving between points served by the Conferences are to be given clean bills of lading, although in direct competition with exporters in the United States.

* * *

The Metropolitan Bag and Paper Jobbers' Association is busily engaged in arranging for its annual banquet, which will be held March 10 in the Grand Ball Room of the Hotel St. George, Brooklyn. This banquet will celebrate the tenth anniversary of the existence of this organization, which is probably the oldest active trade association of paper and paper bag jobbers in the country. Arrangements are being carefully made to make this occasion an outstanding gala event in the entire industry. Besides a few guests of honor, who are outstanding figures in the industry, who will be present to address the meeting, a DeLuxe entertainment of high calibered stars has been arranged. At a meeting of the association, held at the Hotel St. George January 13, a resolution was passed by the association, whereby the association and its members declared themselves in favor of the elimination of the manufacture of flat bags. It was the sense of the association that with the square bag as the only bag made and sold in the metropolitan district, great waste can be eliminated and economies accomplished which shall react to the benefit of manufacturer, jobber and consumer. At the December meeting of the association a resolution was passed recommending the immediate adoption of the new price list for paper bags. The association felt proud of the fact that although the paper bag manufacturers found it necessary to postpone their adoption of this new list for month after the date originally set by them, the members of the metropolitan association adopted the new list on time as resolved. The officers are President, A. E. Macadam, Jr.; Vice Pres., T. J. Nagle; Sec., A. Moller; Treas., E. C. Droge, and Counsel, J. Saul Barshay.

New Process Pulp Moulding Machinery

The Rexpulp Company, 52 William street, New York, has been incorporated in the State of Delaware, to manufacture new process pulp moulding machinery. S. Stanwood Menken is president of the new corporation.

Under a new method to be inaugurated by the organization, articles in round, square, and various other styles and shapes can be built on machines, which had been considered impossible to manufacture before by machinery. The articles can be made direct from liquid pulp in the machine, without being handled at all, in one operation, coming off on the machine finshed articles.

This is said to be the first time a machine has been built to make moulded pulp articles on machines by continuous operation, which will produce an article lined on one side, or both sides, with different quality or finish from the center of the stock material. Patents have been applied for in the United States and foreign countries.

Merle P. Chaplin, inventor and chief engineer, is also secretary of the Rexpulp Company, Inc. Mr. Chaplin was for a great many years in the mechanical department of the Keyes Fibre Company, of Waterville, Me., makers of the famous Papyrus pie plates. Mr. Chaplin invented many improvements in their machines, on which he took out patents, which he assigned to the organization during his employment there.

He is a member of the Technical Association of the Pulp and Paper Industry, and was recently connected with the engineering department of the Bell Telephone Laboratories, Inc., subsidiary of the American Telephone and Telegraph Company and the Western Electric Company.

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SULPHITES
KRAFT PULPS
GROUND WOOD
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ESTABLISHED 1872
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PAPER
The Magazine of the Paper Industry
HENRY J. BERGER, Editor

Member A. B. C. Audit Bureau of Circulations

Vol. LXXXIV New York, January 27, 1927 No. 4

COMING EVENTS

Fiftieth Anniversary of the American Paper and Pulp Association, Convention and Meeting of Affiliated Associations, Waldorf-Astoria Hotel, February 21-24. Annual Banquet, Grand Ball Room, Thursday, February 24.

National Paper Trade Association of the United States, Convention, Waldorf-Astoria Hotel, February 21-23. Theatre Party, Imperial Theatre, Musical Comedy, "Oh, Kay"; Supper Dance, Hotel Astor Roof, Wednesday, February 23.

Technical Association of the Pulp and Paper Industry, Convention, Waldorf-Astoria Hotel, February 21-24. Annual Banquet, Hotel Commodore, Wednesday, February 23.

Salesmen's Association of the Paper Industry, Convention, Waldorf-Astoria Hotel, February 22. Annual Banquet and Dance, Roof Garden, Tuesday, February 22.

New York Association of Dealers in Paper Mill Supplies. Annual Banquet, Hotel Astor, Wednesday, February 23.

COMBINED PRACTICAL AND TECHNICAL

The whole art of paper making has advanced not alone by improved mechanical methods, but also by eliminating all element of guess work by scientific methods, which is the result of the employment of men versed in the knowledge of many arts. Practical men, there always will be, to be sure, but they will not be advanced beyond machine tenders or boss machine tenders. We have now reached the stage where each man is good only on the position he occupies. He certainly does not have opportunity, in a practical way to learn all about the whole science of the paper industry.

If practical experience cannot give us the qualifications necessary to encompass the whole science of making paper from the first process to the last which is marketing the same, then it is necessary for us to take up the trade from its technical requirements. How is this to be done? It will have to be done through study classes. This of course, will require that we give some of our spare time to study. Many will say that they are tired after an eight-hour grind on a paper machine and are not in a mood to apply themselves to serious study. Be that as it may, if we wish to go forward to higher positions in the industry, we have got in some manner to gain this technical knowledge. Those who come into the trade through the research and executive departments have not the same favorable opportunity to learn every detail of the art of manufacturing paper, as have the men who start in as apprentices on the paper machines and work up after years of experience with the peculiarities of numerous mechanical operations in the process of forming the furnish into a sheet of paper and into a finished product for shipment.

If we combine our advantage in this respect with the advantage procured through technical education, there is no reason why men who come in at the bottom cannot attain the highest position the trade or industry has to offer. This, in the opinion of the writer, is the only sure way to advance our interests.—*Paper Makers' Journal.*

The foregoing abstract from an editorial entitled "Practical Paper Makers vs. Technical Education" from the December issue of the *Paper Makers' Journal,* the organ of the International Brotherhood of Paper Makers, the PAPER TRADE JOURNAL feels sure represents the viewpoint of the large majority of the mill operators and foremen in pulp and paper mills generally, although addressed particularly to those in the ranks of the labor union.

The paper makers labor union organization is to be congratulated on this evidence of its forward looking policy and it is fortunate that there are facilities already available for all those who wish to get the technical education to balance their practical knowledge.

A notable achievement in preparing a set of textbooks in five volumes on the Manufacture of Pulp and Paper was completed two years ago by the Joint Textbook Committee with Mr. J. N. Stephenson as editor representing the Technical Association and the Canadian Technical Section and financed jointly by the paper mills of United States and Canada.

The Joint Committee on Vocational Education, with the same representation, coincident with the publication of the textbooks also arranged for correspondence courses based on them. These are provided by three agencies, the Extension Division of the University of Wisconsin, the Department of Education of Massachusetts, and the Institute of Industrial Arts, Gardenvale, Que., and are available anywhere in the world.

Besides these facilities for vocational education the paper companies have in general extended their most cordial support, providing class instructors to assist their workmen who have undertaken the home study courses, arranging for lectures on special subjects and in many cases refunding the cost of the courses to those completing them successfully. In several states and provinces where paper manufacture is an important industry vocational schools in paper making have been provided in different centers.

Nevertheless in spite of all the evidences of progress in the past three years, it is doubtless true that less than 2 per cent of the paper mill workers are taking advantage of their opportunities and the advice of the organ of the paper makers labor union is timely.

That the Technical Association and the Canadian Technical Section are doing their utmost to further the cause of vocational education is shown by the Joint Committee's having secured the services of Mr. T. Linsey Crossley, an experienced educator as well as a technically trained but practical paper maker, to interest the mill executives and also the mill workers in the correspondence courses.

In order that the textbooks may be entirely up to date the third volume covering the manufacture and treatment of wood pulp, although published but five years ago, has already been revised to include the important developments that have been made in the meantime. The fourth and fifth volumes dealing with the manufacture of paper will be shortly similarly revised.

The foregoing represents what the farsighted leaders in the industry, themselves of well rounded training and experience, have done to provide the broad technical knowledge of the art to balance the practical experience which the mill workmen already have.

In 1925, the TAPPI Committee on Vocational Education, having completed its work satisfactorily, was discharged and in its stead a Committee on Training in the Paper Industry was formed with Mr. Martin L. Griffin, the dean of the paper mill chemists, as its chairman. The duties of this committee included the development of a plan whereby technical college students and graduates might get the practical training in the industry necessary for their successful advancement. To this end the personnel of the committee has included representatives of the technical schools providing chemists and engineers for the industry, leading engineers connected with the machinery manufacturers building pulp and paper machinery, and paper mill managers representing the paper mills.

The results expected from this committee are that the technical colleges, the manufacturers of paper mill machinery and the manufacturers of pulp and paper, by working together, will make it possible for the young chemists and engineers to balance their technical knowledge with the necessary practical experience in the line they elect to follow. Although definite results have as yet been meager it is believed that progress can be seen. The technical schools that provide special courses in pulp and paper now have no difficulty in placing their students in paper mills during the summer vacations, where they are required to work in some capacity for a definite period for successful completion of their course.

The next step to be made is to develop a plan whereby the chemists and engineers may similarly be provided with opportunities for summer vacation employment in paper mills or machinery plants so that at the end of their technical course they will have had a rational course in practical paper manufacture or machine design construction and repair.

When such a plan has been worked out and is in effect the technically trained graduate will be provided with the needed practical experience as through the correspondence courses and self-study the man with practical experience will have attained technical knowledge, and they will meet on an equality, as at the present time many of them meet as members of the Technical Association of the Pulp and Paper Industry.

To Be Director of Crystal Waxing Co.

[FROM OUR REGULAR CORRESPONDENT]

Dayton, Ohio, January 24, 1927.—M. H. Lund, who has been in the sales organization of the Crystal Waxing Company, Amanda, for the last six years, was elected to the Board of Directors at the annual meeting held in Middletown the past week. The Crystal Waxing Company is affiliated with the Crystal Tissue Company.

Mr. Lund's election to the directorate is in recognition of his services, which have been quite valuable to the entire organization.

Other directors chosen were W. O. Barnitz, D. E. Harlan, Charles S. Moore, the latter of Daytona Beach, Fla., and Z. W. Ranck.

The Crystal Waxing Company is engaged in the manufacture of waxed tissue paper and is closely allied with the other large Crystal interests.

The Crystal Tissue Company entertained a number of visitors during the week. Among the number were E. F. Peck, one of the directors, whose home is in Chicago; Ray Phillips, of the R. E. Phillips Bros. Company, and Edgar Hall of the Pilcher-Hamilton Company, Chicago.

Mr. Peck is a heavy stockholder in the Amanda concern and is widely known in Middletown paper mill circles.

Canadian Pulp and Paper Exports Decline

According to the report issued by the Canadian Pulp and Paper Association the exports of pulp and paper from Canada in December were valued at $15,202,140, which was a decline of $350,000 from the November total but an increase of $77,000 over the figures for December 1925.

The total for the month was made up of exports of wood-pulp valued at $4,354,177 and exports of paper valued at $10,847,963, the corresponding figures for November being $4,718,435 and $10,853,090 respectively.

Details of the various grades of pulp and paper are as follows:

	December 1926		December 1925	
PULP:	Tons	Value	Tons	Value
Mechanical	31,290	$ 929,576	37,340	$1,126,211
Sulphate	13,234	819,432	13,972	864,133
Sulphite Bl.	15,272	1,243,523	14,159	1,139,445
Sulphite Unblchd.				
	84,050	$4,354,177	93,419	4,625,240
PAPER:				
Newsprint	156,400	$10,344,574	137,140	$9,779,855
Wrapping	1,029	117,766	1,519	205,616
Book (cwts.)	5,263	47,267	7,511	57,424
Writing (cwts.)	1,842	15,428	2,491	19,931
All Others		322,928		436,880
		$10,847,963		$10,499,706

For the year 1926 total exports of pulp and paper were valued at $173,491,635, as compared with a total of $154,555,951 for the year 1925, an increase for the past twelve months of $18,935,684 or over 12 per cent.

Exports of wood-pulp in 1926 were valued at $52,077,122 and exports of paper at $121,414,513, an increase over 1925 of $4,145,217 in the value of pulp exports and of $14,790,467 in the value of paper exports. The greatest increase was shown in the exports of news print, which rose from 1,401,655 tons valued at $90,945,37 in 1925 to 1,731,986 tons valued at $114,089,595 an increase of 330,331 tons in quantity and $15,144,258 in value.

Details for the year are given below.

	Year 1926		Year 1925	
PULP:	Tons	Value	Tons	Value
Mechanical	382,077	$11,505,818	360,205	$10,573,273
Sulphate	165,433	10,443,538	149,722	9,158,861
Sulphite Bl.	200,995	15,734,220	185,890	14,049,500
Sulphite Unbld.	254,576	14,393,546	263,854	14,150,271
	1,003,081	$52,077,122	959,671	$47,931,905
PAPER:				
Newsprint	1,731,986	$114,089,595	1,401,655	$98,945,337
Wrapping	18,522	2,259,663	20,535	2,779,298
Books (cwts.)	60,545	520,337	47,765	434,693
Writing (cwts.)	19,044	143,806	12,371	102,039
All Other		4,401,112		4,362,679
		$121,414,513		$106,624,046

Exports of pulpwood were somewhat smaller in 1926, the total being 1,391,738 cords valued at $14,066,030 as compared with 1,423,502 cords valued at $14,066,030 exported in 1925.

To Meet on Tissue Simplification

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., January 25, 1927—It is understood that a simplification meeting in connection with the program for simplification of tissue paper will be held in New York City on February 23. This meeting will be in connection with the revision of the present program which is in effect. Members of the Tissue Paper Manufacturers Association will be in attendance. H. R. Colwell is in charge of this program on behalf of the Simplified Practice Division of the Department of Commerce.

Makes Rag Paper For New York Times

[FROM OUR REGULAR CORRESPONDENT]

HOLYOKE, Mass., January 25, 1927.—The paper used by the *New York Times* for the printing of the limited number of copies on 100 per cent linen paper is being made by the Valley Paper Company of this city. Newspapers are printed on wood pulp paper or paper made largely from wood pulp; and the limited all linen copies are to be used for the *New York Times* files and such libraries as may arrange for them.

FACTS

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Section of the

Technical Association of the Pulp and Paper Industry

AN ORGANIZATION FOR THE ENCOURAGEMENT OF ORIGINAL INVESTIGATION AND RESEARCH WORK IN MILL ENGINEERING AND THE CHEMISTRY OF PAPER, CELLULOSE AND PAPER-MAKING FIBERS GENERALLY; IT AIMS TO PROVIDE MEANS FOR THE INTERCHANGE OF IDEAS AMONG ITS MEMBERS IN ORDER THAT PROCESSES OF MANUFACTURE MAY BE MADE MORE EFFICIENT AND IMPROVED ALONG TECHNICAL LINES.

Conducted by W.G.MacNAUGHTON, Secretary

Proposed Standard Test Conditions for Determining the Initial Strength Of Pulp

By G. P. Genberg, Chairman Sulphite Pulp Committee

Since the first method for determining the strength of pulp for paper making adopted in 1916 by the Technical Association many modifications have been developed in different laboratories chiefly in regard to apparatus and details of procedure.

Following the intensive study in recent years in the Forest Products Laboratories of United States and Canada and in numerous paper mill laboratories, it has become evident that the initial strength of pulp where it has not been subjected to mechanical treatment is an important indication of its value for paper making.

With the development of the papermaking art there are now many classes of paper made in many mills where the pulp is not given mechanical treatment in the process of manufacture.

The proposed standard conditions have been formulated by the Sulphite Committee of which G. P. Genberg is chairman, with the belief that it covers the essential details of a method with which concordant results can be obtained.

This will be presented for discussion at the Annual Meeting in New York, February 21 to 24, 1927.

1. Disintegration

The pulp sample to be tested shall be in a perfect state of disintegration, this having been accomplished in such a manner that no hydration or cutting of the fibers has taken place.

2. Preparation of Disintegrated Pulp

The pulp shall be diluted to 0.5 per cent consistency. The exact consistency must be determined in each case, so that the exact amount of fibers can be measured out for the test sheets.

3. Area of Test Sheets

The area of the test sheets shall not be less than 36 square inches and not more than 81 square inches.

4. Weight of Test Sheets

The test sheet shall have a weight equivalent to 125 pounds per ream, 500 sheets 25x40 inches and must not vary in weight more than + or — 3 pounds on this basis.

5. Sheet Making

The test sheets shall be made on a sheet machine. The screen shall be covered to a depth of about 4 inches with clear water. The volume of diluted stock corresponding to the quantity of fibers required to make a sheet of the weight given is poured in and the deckle box is filled with clear water to such a height that it will require 12 to 14 seconds from the time the discharge valve opened until the water has left the sheet completely.

The sheet shall be made as follows:—The suspension of fibers is mixed with the hand and no time is allowed for settling, the discharge valve, which must be a quick opening gate valve, being opened immediately on withdrawing the hand. The sheet shall be couched off on a damp felt and placed on another felt. Each sheet shall be placed evenly on the felt covering the previously made sheet and a galvanized iron plate shall be placed on top and bottom of the stack.

A sufficient number of test sheets shall be made, so that a sufficient number of determinations can be made to insure an accurate average of each strength property desired.

6. Pressing

The sheets shall be pressed between the felts for 30 seconds at 40 pounds per square inch sheet area.

The sheets shall then be removed and pressed between dry and cool blotters. Eight blotters shall be used for each test sheet. The pressure shall be raised to 200 pounds per square inch sheet area and allowed to remain for exactly 5 minutes. The test sheets shall then be transferred to dry blotters, four for each sheet and again pressed, raising the pressure to 200 pounds per square inch sheet area and leaving for two minutes.

7. Drying

The pressed sheets shall be dried at 65 per cent relative humidity at 70° F. temperature.

8. Weighing of Test Sheets

The sheets shall be weighed on a scale having a sensitiveness of 10 mgr. per 50 grams. The weight shall be expressed in grams and hundredths of grams and then recalculated in pounds per ream.

9. Testing of Sheets

The sheets shall be tested for strength properties at 65 per cent relative humidity and 70° F. temperature on apparatuses recognized as standard.

10. Computation of Results

All tests shall be reported in per cent points per pound base weight.

Official Paper Testing Methods*

of the Technical Association of the Pulp and Paper Industry

Official Method for Determination of Machine Direction of Paper

I. TERMINOLOGY AND DEFINITION:

The two major directions of paper shall be termed:

Machine Direction—The direction of paper parallel to its forward movement on the paper machine.

Cross Direction—The direction of the paper at right angles to the machine direction.

II. SPECIMENS:

The test specimens shall be cut with sides parallel to the major directions of the original paper sample sheets. The major directions of both the sample sheets and the test specimens shall be so marked that they can be respectively identified. For method 1, a piece approximately 50 mm. (2 inches) square or a circular piece 2 inches in diameter, and for method 2, two strips approximately 12.5 mm. (0.5 inch) wide and 152 mm. (6.0 inches) long, cut at right angles to each other, shall be used.

III. METHODS:

A positive result obtained by one of the following methods shall be regarded as a conclusive determination.

1. Float the specimen on water and note the direction of the curl. The axis of the curl is parallel to the machine direction of the paper. Paper which absorbs water readily should not be exposed to the water for more than a few seconds.

2. Hold the two strips by the ends in a horizontal position, one over the other, placing first one and then the other on top. The strip cut in the cross direction will bend the more and fall away from the one cut in the machine direction.

3. Burst the specimen, using the instrument described in the official method for determination of bursting strength. The chief line of rupture will be at right angles to the machine direction of the paper.

IV. REPORT:

In reporting test results the terms "machine direction" and "cross direction" shall be used. When the strength of paper in the two major directions is reported, it shall be understood that the line of bending or rupture of the paper was at right angles to the major direction specified.

V. ADDITIONAL INFORMATION:

By the term "grain" as applied to paper is meant the machine direction of the paper.

Official Method for Determination of Ream Weight of Paper

I. APPARATUS:

The balance used for weighing paper shall have a sensitivity of not less than 0.25 per cent of the load applied and shall be so graduated that readings of this degree of accuracy can be made. The balance shall preferably be a specially constructed sheet weighing device indicating the equivalent weight of a 500-sheet ream and a 480-sheet ream in pounds when a specimen consisting of one sheet of designated size is weighed. The balance must be protected from air currents.

The scale used for measuring the size of the specimen shall be graduated not more than 0.05 inch (1.27 mm.).

For trimming the specimens to the desired size, a special paper cutter with an attachment for ensuring parallelism of the opposite cut edges is recommended.

II. CALIBRATION:

The balance shall be calibrated at intervals of not more than 30 days, both with increasing and decreasing load, by applying accurate weights. Care must be taken that before calibrating, the balance is properly leveled and gives zero reading with no load.

III. METHOD:

The specimen for test shall consist whenever possible of at least 10 sheets, 10 by 10 inches (254 mm.) in size, of book or writing papers and equivalent amounts of other kinds of paper of greater or less weight than these. The specimen shall be conditioned by the official method, cut accurately as to parallelism of opposite edges, its exact dimensions measured to the nearest 0.05 inch (1.27 mm.), and its weight then determined to the nearest 0.25 per cent of its total weight, the entire operation being carried out in the official atmospheric conditions. When a balance is used which does not indicate the ream weight directly, the weight in grams of a single sheet multiplied by 1.102 gives the equivalent weight in pounds of a 500 sheet ream for sheets having the size of the sheet weighed. Duplicate determinations when calculated to ream weight shall agree within 1 per cent of the ream weight.

IV. REPORT:

The report shall give the equivalent ream weight in pounds for a ream consisting of 500 sheets, 25 inches (635 mm.) by 40 inches (1016 mm.) in size, and also the equivalent weight for the basic weight area commonly used by the paper industry for the particular kind of paper. The weight shall be reported to the nearest 1 per cent of the total ream weight.

V. ADDITIONAL INFORMATION:

To convert the weight of a standard ream of 500 sheets, 25 by 40 inches in size, to the weight of a ream of 500 sheets of trade custom size, multiply the former by one of the factors given below:

Kind of Paper	Trade Custom Size (inches)	Factor
Blotting	19 x 24	0.456
Blue and brown print	17 x 22	.374
Boards		
Bristol and tag	22½ x 28½	.641
Card	22 x 28	.616
Book	25 x 38	.950
Cover	20 x 26	.520
News	24 x 36	.864
Tissue	20 x 30	.600
Wrapping	24 x 36	.864
Writing	17 x 22	.374

Official Method of Determining the Thickness of Paper

I. APPARATUS:

(a) A micrometer of the spring actuated, dial type shall be used. The plunger shall be capable of being raised by the application of an upward pressure to it. The plunger surface shall be circular in shape and not less than 9.7 mm. (0.38 in.) nor more than 16 mm. (0.63 in.) in diameter. The dial shall be graduated preferably in divisions indicating a thickness of 0.0127 mm. (0.0005 in.) and in no case greater than 0.025 mm. (0.001 in.) Graduations indicating a thickness of 0.0254 mm. (0.001 in.) shall be at least 3 mm. (0.12 in.) apart. Convenient means shall be provided for setting the pointer to zero position.

(b) The surfaces of the plunger and anvil shall be plane and parallel to within 0.005 mm. (0.0002 in.)

(c) Under normal operating conditions the downward pressure of the plunger shall be not less than 709 g. (25 oz.) and not more than 1418 g. (50. oz), at a reading of 3.81 mm. (0.15 in.)

(d) Measurements made on standard steel thickness gages shall be within the following tolerances.

Intervals	Permissible Deviation of Reading from Actual Thickness of Standard Steel Gage
0 to 0.25 mm. (0 to 0.01 in.) incl.	0.0025 mm. (0.0001 in.)
Over 0.25 mm. to 1.02 mm. (0.01 to 0.04 in.)	0.0051 mm. (0.0002 in.)
Over 1.02 mm. to 3.05 mm. (0.04 to 0.12 in. incl.)	0.0102 mm. (0.0004 in.)

II. SPECIMENS:

The test specimens shall consist of original sample sheets so selected as to be representative of the entire sample.

* Additional methods that have been formally adopted by letter ballot of the members of TAPPI. See also Paper Trade Journal, Sept. 9, 1926.

III. METHOD:

At least 10 thickness tests shall be made, each on a different specimen except in the case of paper less than 0.05 mm. (0.002 in.) in thickness when a sufficient number of specimens shall be placed together and tested so that a reading on the scale of not less than 0.13 mm. (0.005 in.) is obtained. Thickness tests shall be made on specimens conditioned by the official method and in the atmospheric conditions therein specified.

IV. CALIBRATION:

(a) For testing for compliance with Section 1 (b), a hard steel ball, 4.77 mm. (0.125 in.) in diameter shall be placed at different points on the anvil and the thickness readings observed. It is recommended that the ball be fixed in a flat piece of metal, part of which acts as a handle.

(b) For testing for compliance with Section 1 (c), the pressure must be measured by means of a suitable balance device applied to the plunger. (Details of such device may be obtained from the U. S. Bureau of Standards.)

V. REPORT:

The average, maximum and minimum thickness shall be reported in parts of an inch to the nearest .0025 mm. (.0001 in.)

VI. ADDITIONAL INFORMATION:

A Study of Commercial Dial Micrometers for Measuring the Thickness of Paper, P. L. Houston and D. R. Miller, Technologic Paper No. 226, U. S. Bureau of Standards.

Official Method for Quantitative Determination of Moisture of Paper

I. APPARATUS:

The special apparatus required for this determination is an air tight container in which the specimen is dried and weighed. For the minimum size specimen designated, a weighing bottle approximately 65 mm. (2.56 in.) in height and 45 mm. (1.77 in.) in diameter is suitable. For larger specimens, proportionately larger containers should be used.

The oven used to dry the paper shall be equipped with means for ensuring adequate temperature control and air circulation and preferably equipped with means of drying the air entering the oven.

II. SPECIMEN:

The specimen for test shall consist of not less than 2 g. of paper obtained by cutting small strips from different portions of the test sample in such a way as to be representative of it.

Note: When the paper under test is not in moisture equilibrium with the surrounding atmosphere, care must be taken to minimize the time of exposure of the test sample to the atmosphere as much as possible, gain or loss of moisture being very rapid under this condition.

III. METHOD:

The specimen shall be placed in a weighed air-tight container, the container closed and the weight of the specimen obtained. The cover of the container shall be removed and the paper dried in the container, in an oven having an adequate circulation of air, at 100 to 105° C. (212 to 221° F.), for one hour. The container shall then be closed in the oven, removed to a desiccator and cooled in the desiccator to room temperature. The container and paper shall be weighed and the entire process repeated until the weight is constant. All weighings shall be made to an accuracy of 1 mg. The percentage results of duplicate determinations of moisture shall agree within 0.2.

IV. REPORT:

The amount of moisture shall be reported as a percentage, (1) of the original weight of the paper and (2) of the bone-dry paper, to the nearest 0.1.

Official Method for Quantitative Determination of Ash of Paper

I. APPARATUS:

A crucible, such as platinum, alundum or porcelain, which will not change in weight under the ignition conditions used and with a tightly fitting lid; a balance sensitive to 1 mg.; and a desiccator, are necessary for this determination. An electric muffle furnace is recommended for burning the paper.

II. SPECIMEN:

The test specimen shall consist of not less than 1 g. of air-dry paper obtained by cutting small strips from different portions of the sample in such a way as to be representative of it.

III. METHOD:

The specimen of paper shall be weighed in the crucible and completely ignited. To avoid loss of small particles of the specimen, care must be taken to heat it slowly and to protect the contents of the crucible at all times from strong drafts. When the paper is completely burned, as indicated by absence of black particles, the crucible shall be removed to desiccator, covered and allowed to remain until its temperature has reached equilibrium with that of the surrounding atmosphere. The crucible and contents shall then be weighed and the ignition and weighing repeated until the weight is constant. All weighings shall be made to an accuracy of 1 mg. The percentage results of duplicate determinations of ash shall agree within 0.2.

IV. REPORT:

The amount of ash shall be reported as a percentage of the air-dry paper to the nearest 0.1 per cent.

Official Method for Determining the Tearing Strength of Paper

I. APPARATUS: LL.

The testing apparatus shall consist of a stationary jaw, a movable jaw carried on a pendulum, a slitting device and a device for registering the tearing force. The pendulum shall preferably be in the shape of a sector and carry on it a scale, the graduation of which shall indicate the tearing force, preferably directly in grams, from 0 to 100, laid off on the sector within approximately 50° of arc. A stop shall be provided for holding the sector in its initial displaced position and for releasing it quickly. With the pendulum in its initial position ready for a test, the two jaws shall be seperated by an interval of about 3 mm. (0.12 in.) and shall be in line so that the specimen clamped in them lies in a plane perpendicular to the plane of oscillation of the pendulum, and so that the tops of the jaws are in a horizontal line. The movable jaw shall be so placed on the sector that a line in the plane of the sector from the point of suspension of the pendulum to a point where the top of the jaw is in contact with the specimen shall be about 10 cm. (4 in.) long and shall make an angle of about 30° with the plans of the specimen. The slitting device shall be so arranged as to cut an initial slit in the specmen half-way between the two jaws and extending from the lower edge of the specimen to a distance of about 4 mm. (0.16) in.) above the top of the jaws.

II. SPECIMENS:

Specimens for test shall be cut accurately in each principal direction of the paper not less than 6.3 cm. (2.5 in.) in length (the horizontal position when placed in the jaws) and of such width that the paper shall extend exactly 4.3 cm. (1.69 in.) above the apex of the initial slit. The edges of the specimens must be clean cut and the opposite edges parallel. The specimens shall be so selected from a sample secured by the official method as to be representative of it.

III. METHOD:

Enough sheets shall be torn at one time so that the readings on the scale shall be not less than 20 g. and not more than 40 g. The test specimen shall be so placed in the jaws that it rests evenly on their bottom plates and so that the paper extends a distance of not less than 2.5 cm. (1 in.) into the movable jaw. Readings obtained when the tear deviates more than 6.3 mm. (0.25) in.) from the line of the initial slit shall be rejected. The sector stop must be released sharply in operating the instrument. The knife for making the initial slit shall be maintained sharp. Not less than 5 tearing tests shall be made in each principal direction of the paper and the results shall be computed in grams per single sheet of paper by multiplying the readings of the instrument by 16 and dividing by

the number of sheets tested at one time. Tearing strength tests shall be made on paper conditioned by the official method and in the atmospheric conditions therein specified.

IV. Calibration:

With the sector raised to its initial position and resting against its stop the jaws shall be accurately alined, readjusting the stop if necessary. The ball bearings shall be adjusted so as not to bind and shall be well oiled. The instrument shall be levelled so that the edge of the stop against which the sector rests in its initial position lies vertically below the point of suspension of the sector. A white line is usually placed on the sector for convenience in making this adjustment. With the sector freely suspended and at rest this mark should be in line with the edge of the stop. Verify the position of the mark with a plumb line cutting the axis of suspension of the sector. After being levelled, the instrument shall be operated several times with nothing in the jaws (movable jaw closed) to find if it registers zero with no tearing load. If necessary the pointer stop shall be adjusted until the zero reading is correctly registered. Place the pointer exactly on zero. Without again touching the pointer operate the instrument three times, being very careful each time not to jar the pointer in setting the sector against its stop. The pointer will be pushed beyond zero for a distance which measures the maximum pointer friction. This should be equivalent to not more than 3 g. (compare with distance from zero to 3 on scale). If necessary to reduce this friction, clean pointer sleeve and groove (washing with gasoline if necessary) and apply fresh oil.

Note: The friction error allowed has been compensated for at its maximum value by the shifting of the pointer stop in adjusting the zero reading.

V. Report:

The results shall be reported in grams to the nearest 1 g. The average, maximum and minimum tearing strength for both of the principal directions of the paper shall be reported. The report shall include the number of sheets torn at one time.

VI. Additional Information:

Tearing Strength Test for Paper, A. Elmendorf, Paper, Vol. 26, folio page 302, April 21, 1920. Tearing Strength of Paper, Supplementary Study of Commercial Instruments of Determining, P. L. Houston, Paper Trade Journal, Vol. 74, No. 10, page 43, March 9, 1922.

Official Method for Qualitative Determination of Casein in Paper

A positive result obtained by the following method shall be regarded as conclusive evidence of the presence of casein in paper.

Millon Method:

Boil 0.5 g. of paper several minutes with 10 cc. of a 1 per cent solution of caustic soda. (Caustic soda is required to dissolve casein that has been hardened by formaldehyde or other agents.) Filter off the aqueous extract, cool to room temperature, add a suitable indicator such as phenolphthalein and exactly neutralize with nitric acid. Add several cc. of Millon's reagent prepared as follows: Dissolve 20 g. of c. p. mercury in 40 g. of concentrated c. p. nitric acid and dilute the solution to 180 cc. with distilled water. Upon heating the presence of casein is indicated by the development of a red coloration. (This reaction is dependent on the presence of tyrosine which occurs in casein to the extent of approximately 5 per cent, but has been reported only in rare instances as occurring in animal glue and gelatine, and then only in doubtful traces.)

Official Method for Qualitative Determination of Rosin in Paper

A positive result obtained by both of the following methods shall be regarded as conclusive evidence of the presence of rosin in paper.

I. Lieberman-Storch Method:

Place 1 g. of paper cut in small pieces in a clean, *dry* test tube Add 5 cc of c.p. acetic anhydride and boil down to about 1 cc. (The fumes of anhydride are very irritating and should be burned as they leave the test tube.) Pour the liquid residue into a clean, dry porcelain crucible and cool to room temperature. If any waxy particles separate, they should be filtered off. Add carefully, down the side of the crucible, one drop of concentrated sulphuric acid. A fugitive rose-violet coloration formed when the acid meets the anhydride indicates rosin.

II. Raspail Method:

Place the paper on a glass or porcelain plate and apply a drip of strong solution of sugar. After a few moments remove the excess strong solution with filter-paper. Add a drop of concentrated sulphuric acid to the sugar on the paper. A raspberry-red coloration indicates the presence of rosin.

Official Method for Qualitative Determination of Nitrogenous Proteinaceous Materials in Paper

A positive result obtained by the following method shall be regarded as conclusive evidence of the presence of nitrogenous (proteinaceous) materials, such as glue and casein, in paper.

I. Ammonium Molybdate Method:

Boil 0.5 g. of paper for several minutes with 10 cc. of a 1 per cent solution of caustic soda. (Caustic soda is necessary as the nitrogenous materials may have been made insoluble in water by hardening treatment with formaldehyde or other agents). Filter off the aqueous extract and after cooling add a suitable indicator, such as phenolphalein, then exactly neutralize with hydrochloric acid. Prepare Schmidt's reagent by dissolving 3 g. of c. p. ammonium molybdate in 250 cc. of distilled water and adding 25 cc of c. p. nitric acid of 1.2 specific gravity. (This reagent is not permanent and should be made freshly at frequent intervals.) Add 1 volume of the reagent to 2 volumes of the aqueous extract. A white precipitate shows the presence of nitrogenous materials derived from proteins.

II. Additional Information:

References, Carson, F. T., Detection of Animal Size in Surface Sized Papers, Paper Trade Journal, April 10, 1924. Griffin, R. C., Technical Methods of Analysis. Chem. Zeitung, Vol. 36, p. 313 (1912); Farber-Zeitung, Vol. 24, p. 97 (1913); Schmidt.

Note. This test is very delicate. If no precipitate or only a slight precipitate is obtained there can be no appreciable amount of proteinaceous materials present.

Official Method for Quantitative Determination of Poteinaceous Nitrogen in Paper

I. Apparatus:

A Kjeldahl digestion and distillation apparatus is required for this determination. A 500 cc. Kjeldahl flask is a suitable size. The balance used shall be sensitive to 1 mg.

II. Specimen:

The specimen shall consist of from 3 to 5 g. of air dry paper obtained by cutting small strips from different portions of the test sample, in such a way as to be representative of it. The strips shall be cut into pieces approximately 6 mm. (0.25 in.) square.

III. Method:

The Gunning method is used. Place the specimen, weighed to an accuracy of 1 mg. in the Kjeldahl flask and add 10 g. of powder anhydrous sodium sulphate, a small crystal of copper sulphate (about 0.2 g.), and 25 cc. of concentrated sulphuric acid Heat the flask gently until frothing has ceased and then digest with increasing temperature until oxidation is complete, i.e., for a short time after the mixture becomes clear and colorless or nearly so. Cool and dilute with about 200 cc. of distilled water. Add about 2 cc. of liquid petrolatum to prevent foaming and about 2 g. of 30 mesh granulated zinc to prevent bumping during the distillation. Add a saturated solution of sodium hydroxide to the contents of the flask in such amount (usually 75 cc.) that there is an excess of 5 cc. of the saturated sodium hydroxide

solution present. This solution must be poured carefully down the side of the flask so that it does not mix with the acid contents.

The total volume of the solution should be about 400 cc. Immediately connect the flask to a condenser having its delivery tube just beneath the surface of a known amount of N/10 sulphuric acid diluted to 100 cc. (30 cc. of N/10 acid is usually sufficient.) Mix the contents of the Kjeldahl flask by shaking the flask, then heat it gradually and distill the contents for about 45 minutes, taking care to avoid spurting.

The total volume of the distillate should be about 200 cc. Titrate the contents of the receiver flask with N/10 alkali, using methyl red indicator. The difference between the cc. of N/10 alkali used and the cc. of N/10 sulphuric acid added to the receiver flask is the cc. of N/10 acid equivalent to the nitrogen present. This number multiplied by 0.014 is the nitrogen found. The percentage results of duplicate determinations of nitrogen shall agree within 0.02. A blank determination shall be made on all reagents used and any nitrogen found subtracted.

IV. Report:

The amount of nitrogen shall be expressed as a percentage of the air-dry paper to the nearest 0.01 per cent. If it is desired to report the per cent of glue or of casein present, it shall be calculated by multiplying the per cent of nitrogen found by 5.6 and 6.3 respectively. (Note—As these factors vary with different kinds and grades of material they should be determined whenever the nitrogenous material is available, and whenever possible the nitrogen in the paper before addition of the nitrogenous material should be determined and subtracted from the total nitrogen found.)

Official Method for Qualitative Determination of Starch in Paper

A positive result obtained by the following method shall be regarded as conclusive evidence of the presence of starch in paper

Boil 0.5 g. of paper for several minutes with 10 cc. of water. Filter off the extract and cool it. Add one drop of a 0.01 normal solution of iodine. A blue coloration indicates starch. If only a faint violet coloration is obtained, this should be disregarded, as non-starch constituents of paper sometimes give such reaction.

I. Apparatus:

Official Method for Quantitative Determination of Starch in Paper

A reflux condenser is necessary for this test. The balance used for weighing shall be sensitive to 1 mg.

II. Specimen:

The specimen shall consist of not less than 5 g. of air dry paper obtained by cutting small strips from different portions of the test sample in such a way as to be representative of it. The strips shall be cut into small pieces about 6 mm. (0.25 in.) square.

III. Reagents:

Fehling's solution. (a) 69.3 g. of crystallized copper sulphate are dissolved in water and the solution diluted to 1,000 cc. (b) 346 g. of Rochelle salt and 120 g. of sodium hydroxide are dissolved in water and the solution diluted to 1,000 cc. Allow to stand two days and filter. Solutions (a) and (b) are kept separate and equal volumes of them mixed just before use.

Indicator solutions. A 10 per cent solution of potassium ferrocyanide, and a 50 per cent solution of acetic acid are used.

IV. Method:

Place the weighed specimen of paper in a 500 cc. flask; add 200 cc. of water and 5 cc. of glacial acetic acid. Connect the flask to a reflux condenser and boil the contents vigorously for 1½ hours. Pour the contents of the flask on the perforated plate of a Buchner funnel and wash the pulp on the plate with 50 cc. of hot water using suction. Add 15 cc. of 37 per cent hydrochloric acid to filtrate and boil it for 30 minutes, allowing the volume to decrease by evaporating to about 200 cc. Neutralize the hot solution by adding solid sodium carbonate until effervescence ceases. Cool to room temperature and adjust to a measured volume by means of a volumetric flask. Titrate this solution into a measured quantity of Fehling's solution diluted to 25 cc. After each addition of the titrating solution, boil the reaction mixture for 1 minute. The end-point is determined on a spot plate by adding a drop of the mixture to a mixture of one drop each of the ferrocyanide and acetic acid solutions, and is that point at which no immediate color is produced on the plate. The cc. of Fehling's solution used multiplied by .005 is the grams of starch equivalent to the volume of the titrating sugar solution used. The results of duplicate determinations of starch shall agree within .05 per cent of the total percentage found. As the factor for converting cc. of Fehling's solution to grams of starch varies with different kinds and grades of starch, when the starch used in the paper is available, its exact factor should be determined by the following procedure:

Dry the starch at 100 to 105 degrees c. (212 to 221 degrees F.) for 3 hours. Weigh 0.05 g. and boil with about 190 cc. of a 4 per cent hydrochloric acid solution for 30 minutes. Neutralize with solid sodium carbonate, cool, adjust to a definite volume and titrate a definite volume of Fehling's solution as described above.

V. Report:

The amount of starch shall be reported as a percentage of the air dry paper to the nearest .01 per cent.

VI. Additional Information:

Quantitative Estimation of Starch in Paper, V. Voorhees and O. Kamm, Paper, Vol. 24, folio page 1091, August 27, 1919.

December News Print Statistics

Production of news print in Canada during December 1926 amounted to 163,717 tons and shipments to 161,922 tons, according to the News Print Service Bureau. Production in the United States was 135,069 tons and shipments 136,501 tons making a total United States and Canadian news print production of 298,786 tons and shipments of 298,423 tons. During December 17,215 tons of news print was made in Newfoundland and 1,514 tons in Mexico, so that the total North American production for the month amounted to 317,515 tons.

Adding to the production of the regular news print mills reported monthly throughout the year the small amount made by mills whose product is chiefly of other grades, the total North American output of news print in 1926 was 3,768,315 tons, of which 1,881,737 tons was made in Canada, 1,686,695 tons in the United States, 186,471 tons in Newfoundland and 13,412 tons in Mexico. This was a total increase of 606,511 tons or 19 per cent over 1925. Compared with the previous year, the increase in Canada was 359,520 tons or 24 per cent, in the United States 156,377 tons or 10 per cent, in Newfoundland 89,883 tons or 93 per cent, and in Mexico 731 tons or 6 per cent. United States and Canada totals since 1920 are given in the table below.

During December the Canadian mills operated at 92.4 per cent of rated capacity and the United States mills at 91.3 per cent. Stocks of news print paper at Unied States mills totalled 12,030 tons at the end of December and at Canadian mills 14,345 tons, making a combined total of 26,375 tons, which was equivalent to 2.1 days' average production.

Dayton Beater & Hoist Co. Buys New Factory

Cincinnati, Ohio, January 24, 1927.—The Dayton Beater and Hoist Company, Dayton, Ohio, manufacturers of high speed beaters, have bought the entire equipment and stock of the W. P. Callahan Company, of Dayton, Ohio, manufacturers of engines and oil machinery. They have also leased the buildings of the company, and will start manufacturing their own beaters immediately, as well as carry on the present business of the W. P. Callahan Company. Clarence P. Folsom, president of the Dayton Beater and Hoist Company, would not state the consideration.

Index Technical Section, Vol. 83, Paper Trade Journal

(July to December, 1926)

Prepared by Clarence J. West, Chairman, Committee on Abstracts and Bibliography

The pages in the following index refer to the continuous paging of the Technical Section and have no relation to the paging of the individual numbers of the PAPER TRADE JOURNAL. Pages 112-121 are duplicated, the second set of pages being the last page in the issue for Sept. 30 and the first nine pages in the issue for Oct. 7; for index purposes these second pages are designated with an "a" following them. References to abstracts are preceded by the letter A, those to patents by the letter P. Other entries refer to original articles appearing in the Technical Section; author entries for these articles are in capitals. No author entries are given for the abstracted articles.

In order to facilitate reference to the individual numbers of the PAPER TRADE JOURNAL, the following table is given, showing the pages of the Technical Section appearing in each of the 27 numbers for volume 83 (July-December, 1926):

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Die Strohzellstoffabrikation

DIE STROHZELLSTOFFABRIKATION (The Manufacture of Straw Pulp); by Fritz Hoyer: 346 pages, 195 illustrations and 6 sketches. Published by M. Krayn, Berlin, W. 10, Germany. Price, unbound, 18 marks; bound 20 marks.

The use of chemical straw pulp in paper manufacture dates back to more than one hundred years ago, when Dr. J. C. Schaeffer, in Germany, and Mathias Koops, in England, carried out their experiments with straw and other similar grasses. Since that time, cereal straws and esparto have been used extensively in the manufacture of fine papers, news print paper, cardboard, straw board, etc. The straw pulp industry has become one of ever increasing importance, and therefore the appearance of this book is timely.

In the first of the thirteen chapters, the author briefly relates the history of straw pulp manufacture. Chapter two concerns the raw material: descriptions are given of the different plants, their growth, fiber length, cellulose and ash contents, etc. Rye straw possesses the minimum amount of silicic acid (about 1 per cent), and produces the maximum yield (46 per cent) of pulp. Cereal straws yield 40 per cent to 46 per cent bleached pulp. Other plants described as suitable for pulp manufacture are rice straw, corn stalks, esparto, alfalfa, bamboo, reeds (Phragmites communis and Arundo donax), Typhacae, papyrus, sugar cane, rushes (Heleocharis, Scirpus, and Juncus), reed-mace, marsh grass (Cladium mariscus), Nigeria grass, elephant grass, and Florida saw grass.

Chapter three deals with the manufacture and use of the various chemical substances required for the digestion and bleaching processes. A number of the chemical formulas and several of the statements in this chapter require correction and revision in the next edition. For instance, on page 24, K_2O is referred to as the well known caustic alkali, and in the same line, $CaCO_2$ is given as the formula for chalk.

The gathering, storing, and cutting of straw are described in chapters four and five. Numerous illustrations of machinery are shown. Cooking processes are considered in the next chapter. Besides the older and more usual alkali methods of digestion, the Krais nitric acid process, the Braun salt process, the DeVains chlorine process, and the Rinman process, are described. Several pages are given to digester construction and the use of the Ruths steam accumulator. Different types of washing apparatus, such as spiral presses, suction filters, centrifugal screens, etc., are pictured and reported in chapter seven. In bleaching operations the losses for straw pulp amount to 6 per cent to 10 per cent. The chlorine requirement per 100 kg. straw is 18-22 kg. Other facts relating to bleaching are to be found in chapter eight.

The four chapters, nine to twelve, inclusive, are concerned with pulp dewatering and drying machinery, the utilization of esparto and alfalfa, the beating and refining of straw pulp stock, corrugated paperboard manufacture, waste water purification, and stock recovery. In the last chapter, the author dwells upon the straw pulp and paper mill as a whole, including power-plant management, power distribution, fire protection, etc.

Throughout the volume great emphasis is placed on descriptions of various types of machinery, which is, of course, for the most part, if not all, of German manufacture. Five drawings of mill layouts are attached to the inside of the back cover. To manufacturers of pulp from straw or other grasses, or their conversion products, Engineer Hoyer's book should prove to be valuable.—J. L. P., *Paper and Pulp Magazine.*

To Make Artificial Cotton at Glens Falls

[FROM OUR REGULAR CORRESPONDENT]

GLENS FALLS, N. Y., January 24, 1927.—Coincident with announcement of the resignation of L. Gyle Wilson as manager of the South Glens Falls mill of the International Paper Company, and appointment of C. L. Hoag as his successor, it was learned that plans are already under way for converting the mill at South Glens Falls from news print to Fibrite Valdown, a synthetic cotton. The plant after the changes are completed will employ mostly girls and women.

As the first step preparatory to starting the production of Valdown No. 4 machine, which has operated on news print for a long period is being dismantled to provide space for new machinery which will be shipped from the plant at Bellows Falls, Vt., within the next week or ten days.

Experiments in the production of artificial cotton have been carried on for several months at the Bellows Falls plant. The I. P. Company's decision to utilize the South Glens Falls mill for the manufacture of the synthetic cotton was made only recently as it was the original intention to manufacture the new product in New York City or one of the other Northern New York mills. Difficulty experienced in finding suitable factory space caused the decision to use the South Glens Falls mill.

Valdown, under which name the artificial cotton will be produced, is used extensively in a number of ways particularly as packing in candy boxes because of its moisture holding qualities.

Special machines for the manufacture of Fibrite will be installed later at South Glens Falls. This product will be manufactured at the local plant and shipped to other mills to be converted into sanitary napkins and similar articles.

The dismantling of No. 4 machine leaves the local mill with only one papermaking machine, this being No. 5. This machine will also be dismantled in the near future, it is stated. For many years this mill was known as a seven-machine plant but during the past five years has been run as a two-machine mill.

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Significant Developments in American Industry and Accounting*

By F. R. Carnegie Steele

The origin of accounting was doubtless contemporaneous with the origin of commerce and credit, and it is well known that the double-entry principle that still remains the foundation of all modern bookkeeping was devised and practised successfully in Italy 500 or 600 years ago, approximately when the Venetian merchants, who then dominated the world of commerce, found it necessary to adopt the Arabic figures that we now use, in place of the cumbersome Roman system of numeration. In more recent times the most significant factor in the development of the science and practice of accounting was the industrial revolution in Europe, which, resulting from Watt's invention of the steam engine in 1769, marked the inauguration of the so-called "factory system," whereupon manufacturing processes, conducted mainly as domestic activities, were transferred to factories utilizing mechanical power and equipment and employing paid workers in large groups. Thus, with the growth of the factory system and the rapid expansion of various types of industry, the need for more elaborate and more precise forms of accounting than formerly were necessary became increasingly apparent, although such evolution of accounting was not rapid in the United States and for many years failed to keep pace with the country's remarkable industrial and commercial development.

Recent Industrial Innovations

Within the past twenty-five years, however, and more especially during the post-bellum period, highly significant changes have occurred in American industrial and commercial life. These have been accomplished by equally noteworthy developments and improvements in the science and practice of accounting, and by a widespread recognition of the paramount importance of accurate accounting methods, not only for those actually engaged in industrial and financial enterprises, but also for investors, customers, employees, the courts, the regulatory commissions, taxation authorities and the general public.

Among comparatively recent industrial changes in America may be noted the inception and growth of entirely new industries of great magnitude, such as those producing calculating machines, motor cars, airplanes, moving pictures, radios, oil combustion heaters, electric refrigerators, etc., all of which have opened wholly unanticipated markets for their needs in raw materials, labor and equipment, and, in turn, have been compelled to find markets and marketing methods for their own products, superseding in some instances certain older industries such as those producing horse-drawn equipment, bicycles, phonographs, etc.

Another notable industrial development relates to mass production, a modern method by which great quantities of a single standardized article are manufactured through focusing upon a manufacturing project the principles of power, accuracy, economy, system, continuity and speed, so that there may be delivered in quantities a useful commodity of standard material, workmanship and design at minimum cost. The experience of the Ford Motor Company, a leader in this movement, has been that mass production precedes mass consumption and makes the latter possible by reducing costs, because where production is increased costs may be reduced, with accompanying decrease in selling price and increase in the number of people able to buy the product.

Most noteworthy of all is the striking change that is taking place in the attitude of employees toward wages and conditions of labor, especially in the larger enterprises and in the larger trade unions, a change which plainly shows a definite trend towards partnership in profit through participation by labor in resulting gains, and towards better leadership in industry and commerce. The department of commerce maintains that under this new conception of industrial solidarity the very essence of great production is high wages and low prices, because production depends upon a widening range of consumption that is only to be obtained from the purchasing power of increased wages and increased standards of living. Upon this basis progressive employers are resorting to labor-saving machinery, to chemical and scientific research for better processes, to the elimination of waste and to better administrative methods, instead of resorting to wage reduction in times of stress, with the remarkable result that the output of American industry actually increased 60 per cent between 1914 and 1923, while the number of wage-earners increased only 27 per cent during the same period. Moreover, the hours of labor are being steadily decreased.

Management Problems

The inauguration of new industries, the promotion of mass production, the advance in the wage scale, the exacting re-

* From Journal of Accountancy.

quirements of governmental departments, and the need for fuller utilization of manufacturing facilities in the face of increasing competition both at home and abroad, have brought as natural corollaries many new problems affecting the successful administration of our manufacturing plants and the profitable distribution of their products. Mass producton has necessarly led to mass selling. In order to arouse public interest and create a consumer-demand for the products of industry, vast sums are spent upon new and ingenious forms of advertising, and, in meeting the demand thus stimulated, our entire credit system has been brought under an unprecedented strain through widespread resort to instalment sales, acceptance corporations, cooperative merchandising, etc., as means for facilitating the massed marketing of our products.

Increasing pressure for new outlets for increasing production, and new complications resulting from hand-to-mouth buying, buyers' strikes, etc., have also evoked some new and startling economic doctrines. For example, W. T. Foster, Waddill Catchings and Garet Garrett have recently urged that since it is consumption and not abstinence that stimulates production, it is no longer necessary to conserve, or a duty to save, and their injunction is to consume to the utmost and to disregard thrift as an outworn custom. But thrift, and the well tried precepts of Poor Richard, may not be lightly disregarded, and the sounder and more general belief is that because underproduction creates scarcity and speculation, and overproduction results in losses, suspensions and unemployment, complete information as to productive capacity, volume of production, cost of production, stocks and styles of commodities and as to their current consumption in every industry, is vitally necessary if stable industry and stable profits, without undue margins and speculation, are to be secured.

Among the varied problems confronting business executives are also those incidental to a recent change in industrial leadership which has shifted from private ownership to corporate management, through the modern trend towards the corporate form of organization for business enterprises that now are owned by upwards of 15,000,000 stockholders who actually can exercise little authority over the management of their properties. Quite recently the stockholder's right to adequate information concerning his investment was discussed by Professor William Z. Ripley of Harvard University in a noteworthy article published in the *Atlantic Monthly* which has aroused widespread interest, in emphasizing the need for corporate publicity and sound accounting, he very pointedly said that American business affairs, in so far as they have assumed the corporate form, are still too largely carried on "in twilight," and he suggested that all corporations (except banks and common carriers, might be brought under the control of the Federal Trade Commission, with special reference to matters of accounting.

The Prime Importance of Accounting

In the solution of all such problems of production, distribution and finance under modern operating conditions the prime importance of accounting as an essential agency in promoting and facilitating executive control and in developing public confidence in organized industry is becoming more and more widely recognized and its functions and spheres of usefulness are constantly increasing.

Only recently a committee of the Boston Chamber of Commerce, after conducting an analytical survey of an important but declining industry in New England, called attention to the need for better accounting and administrative procedure, and in presenting recommendations for adoption in that industry said: "Introduce modern cost accounting principles even in the smallest plants to properly determine both direct and indirect costs and aid in the fixing of sales prices; introduce budgeting methods; develop effective production control to facilitate deliveries and assure regularity of operation; adopt and develop standards of labor performance which would increase skilled labor, increase earnings of workers and lower production costs; adopt an open-minded attitude to change so as to overcome the stagnation due to tradition and to assure more effective methods of production and distribution."

Moreover, the United States department of commerce is actively promoting a national campaign for the elimination of industrial waste and the promotion of simplification and standardization in industry. Among the major objects of this campaign are the reduction of periodic waves of unemployment due to booms and slumps of the business cycle; improved statistical service as to production, distribution, stocks and prices of commodities as a contribution to the elimination of hazard in business and wasteful speculation; reduction of waste in manufacture and distribution through the establishment of grades, standards of quality, dimensions and performance and through the reduction of unnecessary varieties; the development of scientific industrial and economic research as the foundation for genuine labor-saving devices, better processes and sounder methods.

Again, the fabricated-production department of the chamber of commerce of the United States has recently stated that if there is one thing more than another which a manufacturer ought to know it is the cost of the products he is selling, for it would be hard to conceive of the head of a manufacturing business signing cheques for unspecified amounts in favor of those from whom he buys goods, yet that is exactly what he is doing when he sells his product and does not know its cost. Therefore, the department holds that one of the most valuable services to be rendered to the manufacturing interests of the country is in relation to the extension of cost accounting and in the installation of carefully designed methods of accounting control. The same organization has also reported that one-quarter of the effort, time and money expended in our factories is utterly lost, and that excess variety and lack of standardization represents one of the most outstanding wastes chargeable to management. Therefore, the chamber states that "competition, efficiency in production, scientific research and elimination of industrial waste all operate in the scaling down of costs and prices and are forces now more in evidence than ever before. As one outstanding means for this waste elimination, simplification and standardization continue to enlist the interest and active support of many of our far-seeing commodity producers." In this relation it may be noted that the national campaign for the elimination of industrial waste and the promotion of simplification and standardization in industry has not only roused widespread interest in those important subjects, but has also vindicated the soundness of accounting principles long advocated by many accountants and practical men, more particularly in relation to the allocation of manufacturing burden (or overhead), the utilization of standard costs and the practice of budgeting as applied to business enterprises.

Allocation of Manufacturing Burden

For many years industrial accountants have held that a most important development in cost accounting relates to procedure for separating the fluctuating expense due to idle factory capacity from normal manufacturing cost. Thus the true working cost of an article should be found irrespective of whether a factory is working at full capacity or is half idle, but such cost was not obtained under the old methods of distributing burden by means of percentages, because those percentages merely represented rough approximations and furnished misleading results. The importance of having idle factory capacity separated from normal cost is apparent in almost every department of accounting, but it has a special bearing on three of the most vital elements of success in business; (1) the determination of a non-fluctuating basis for estimating and setting

sales prices on new lines of product; (2) the determination of a uniform basis for valuation of stock on hand and material in process; on the correctness of which the accuracy of the periodical balance-sheet absolutely depends, and (3) the determination of a normal manufacturing profit on the several lines of manufacture, so that their relative profitableness can be distinguished.

Under the older cost methods overhead expenses were spread too thin in times of forced production and were massed too heavily in period of slight production, giving in the former case costs artifically low and unfair to the management, and in the latter case costs artifically high and unfair to the consumer, and costs which the market could not sustain. To bring out with distinctness the importance of the relation between the cost and selling departments, and the necessity for distinguishing between idle and used factory capacity, there may be considered the case of a new plant with an adequate volume of business, or any plant which from some cause has an insufficient volume and no prospect of an immediate remedy. Here the loading of the expenses of the whole plant upon the inadequate output would produce excessive cost figures tending to discourage a selling department or to arouse a suspicion that competitors were selling below cost, whereas a strict separation of all expenses of unused capacity would result in competitive prices and would create the confidence in which larger sales at lower prices could be made, until little or no idle capacity remained and a reasonable profit could be obtained.

Under modern cost procedure overhead expenses are absorbed and distributed through burden centers, or machine rates, upon the basis of a normal year (careful distinction being maintained between the avoidable cost and the unavoidable cost of unused capacity), a basis which does not imply, however, that actual overhead costs are compromised and abandoned, because actual expense must be currently compared with estimated expense, and any differences revealed will disclose to an executive inefficiencies that must be eliminated, advances or decreases in cost not anticipated, or costs artifically low or high because of abnormal or subnormal production. Of somewhat similar import is the proper treatment of selling expense and administrative expense in many highly seasonal businesses, where sales volume fluctuates widely from month to month while salesmen are paid large commissions on orders taken, rather than on shipments made. Here, if disbursements for selling expense and for administrative expenses are charged off as disbursed from month to month, it is apparent that those months in which shipments are heavy may show abnormal profits while for other months of diminished shipments losses may be incorrectly recorded. In order that the monthly operating accounts of the plant may not misstate actual results under such conditions, accurately planned methods for distributing these expenses over the entire year must be adopted, and for this purpose it is often advantageous to disregard sales (either of the current year or of a preceding period), as a basis for distributing selling and administrative expense, and to adopt as the basis for distribution a composite computation wherein orders taken, shipments made and unfilled orders on hand are all brought into account.

The Utilization of Standard Costs

In harmony with the modern method of allocating manufacing burden another accounting development advocated by industrial accountants, the utilization of standard (or pre-determined) costs, has recently been approved by the sponsors of the national campaign for the elimination of industrial waste and the promotion of simplification and standardization in industry, as a further recognition of the principle that whenever a factory is operated below capacity, increased production can be accomplished at a decreasing cost per unit of output, through relative reduction in expense. Obviously, the use of current costs (without regard to volume of production) results in showing abnormally high costs in periods of subnormal production and unusually low costs in periods of abnormal production, yet sales prices vary in exactly the opposite direction so that costs are low when high selling prices can be maintained, but are high when selling prices must be low in order that sales may be effected.

The job-cost system or system of detailed costs that was formerly favored has proved to be unnecessarily cumbersome, costly and only partly effective, with the result that many progressive manufacturers have abandoned it and are adopting the standard-cost principle, which has been developed to meet the need for more constructive cost information than was available under the older form. The newer plan places emphasis upon vulnerable points in factory operation where failure to reach the standards set will result in loss or inadequate profit, and it discloses this information by drawing attention to significant exceptions showing any marked deviation from the standards established. Under this method, which gives effect to procedure recommended by the chamber of commerce of the United States, an executive currently supervises the operation of his plant through comparison of actual results with predetermined standards, constant comparison being made between actual results and standards, and variations from standards being brought currently to his attention. Standard costs, being flexible, may be recomputed from time to time to reflect new conditions, but they must be susceptible of analysis into elementary standards, so as to reflect truly the efficiency of operation. Thus, the constituent elements entering into the total cost of an article should be so developed in detail that each element of standard cost has a significance in relation to the functional cost of operation of the plant. For example, standard unit costs for labor operations should be established, against which actual labor costs, accumulated by operations, should be compared, in order, to gain a clear view of the efficiency of the management; so the best practice takes into consideration (for purposes of verification), not only the new method, but also some of the essential features of the old job-cost method shorn of all redundant procedure.

With regard to the establishment of standard unit costs for materials and with regard to the stock accounts for materials, it may be noted that in the past the commonly accepted method of recording consumption of materials at original cost has tended to obscure the results accomplished and has failed to provide the correlation which many authorities believe should be maintained between purchasing on the one hand and manufacturing and selling on the other hand. So if manufacturing is to be placed on a truly competitive basis it should not be unduly charged with a loss or credited with a gain that has resulted solely from disadvantageous or advantageous purchasing, but should be on an equal footing with competing industries operating under open market conditions. Therefore, it is believed that the utilization of standard costs for materials used, computed approximately at replacement value, in place of purchase cost, may also serve to determine the efficiency of a purchasing department, for if a comparison should show that the actual charge for material consumed was higher than the replacement charge, it would indicate that purchasing had been indiscreet or untimely, and this fact ought to be disclosed and ought not to be submerged in the general accounting results.

Budgetary Control

A further development in the art of management relates to budgetary control. For many years some organizations have roughly estimated in advance their probable volume of business, probable costs and operating profit, but only recently has such procedure been recognized as practicable in the conduct of an

industrial enterprise. Yet budgeting, as a means of forecasting the course of a business with some degree of accuracy and direction, in order, first, to shape systems of accounts through careful analysis of past performance and full consideration of future trends and possibilities, is manifestly a logical development of cost finding, to be intelligently formulated for the purpose of predicting future conditions and planning future policies, and for the purpose of gaining a supercontrol and coordination over all the activities of a business.

In calling attention to the importance of budgetary control as a means of promoting simplification and standardization in industry, the United States chamber of commerce has recently rendered a noteworthy service and has explained that budgetary control may merely mean a multiplication of useless forms, the only effort of which is to hamper and impede production and sales, or it may mean the wise conduct of business and the subordination of pleasant dreams to actualities, for a budget must be predicated at least upon a knowledge of what a plant can do, what are reasonable sales expectancies, and what financial resources are required and available for the sales and production programmes. The budget as applied to industrial enterprises contemplates the setting up of standards of performance that are expected of the business as a whole, as well as of the several departments and, as the periods covered by the budget elapse, there appear in review the actual results contrasted with such standards, and thus the degree of success or failure in meeting such pre-established goals is consistently revealed.

Extensive research and analysis are requisite before the foundation of effective budgetary control can be established. Markets, both domestic and foreign, must be carefully surveyed in establishing sales quota; production and engineering studies must be made as to the time required to produce goods and as to their cost; the purchasing programme must be intelligently planned with regard to required deliveries of materials; overhead expenses must be thoroughly analyzed and allocated to production units or departments, and working-capital requirements must be carefully computed. Budgetary control shows the executive what sales may be expected in ensuing months, so as to assist him and his sales department in directing sales effort, since the sales quota established by the budget sets a definite mark for attainment. It also establishes production quota, based on the estimated sales, as the result of which the factory manager may plan production well in advance, specifying the amount and kinds of material that will be needed. It forecasts the size and kind of working forces that must be provided; the amount of overhead that will be expended; the requirements in machines and equipment, and it is of great value to the purchasing agent and to the financial executive in gauging working-capital requirements. An executive equipped with a carefully prepared budget, coordinated with a cost system, can obtain a monthly profit-and-loss statement compared with the estimated results predicted in the budget; a monthly balance-sheet showing the actual assets and liabilities compared with their anticipated condition; a monthly comparison of costs of products against standard or budgetary costs, and a monthly comparison of operating costs and of overhead expenses with their standard or budgetary allowances.

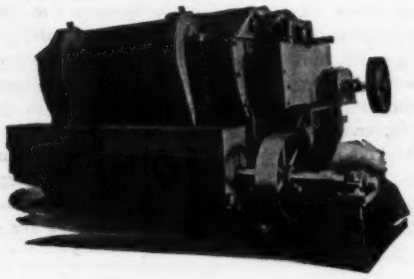
Control of Waste and Defective Work

In industrial life the new conditions that have led to the adoption of labor-saving methods, simplified practice, mass production, standard costs and budgetary control have also led to further utilization of the resources of accounting as an aid to management, with the result that modern accounting is constantly aiming at a closer insight into the actual operation of industrial and commercial organizations and is allying itself with the technical departments engaged in the work of research in the closest conformity with the essential character of the operations, and, second, to give the technical and administrative departments the best means of gauging the money values of actual results. For purposes of administrative control in the conduct of all productive operations, the study of the cause of shrinkage, or loss, or waste of materials in the process of their conversion from the raw state to the finished products is of the highest importance. Such losses, of course, may be entirely physical, visible and separated, as are all kinds of cutting losses, and then they are subject to some kind of physical measurement. They may be minimized through improvement in design of product, through care in avoiding spoiled units of production, through efficiency in the purchase, care and issue of materials, and through seeing that materials are not allowed to become obsolete; but their occurrence and their incidence should always be clearly defined in a well planned system of accounting. On the other hand, they may be either physical or chemical and not visible, as in the case of materials lost in solution, evaporation or chemical processes and thus may call for laboratory investigation if they are to be analyzed and their causes identified. Accounting ordinarily can determine the quantities of such wastes and can show their fluctuations so as to indicate general efficiences and net results, but in such cases it is through the work of the chemist in conjunction with process accounts that certain causes and their operation can be traced and connected with money values and with their ultimate effect upon profits.

Labor-Saving and Mechanical Devices in Accounting Work

There is probably no form of accounting that could not be conducted with absolute correctness by means of the old-fashioned set of three simple books (cashbook, journal and ledger), but such accounting by the old method would require one hundred bookkeepers where ten now suffice. Since accounting itself is nothing but a device discovered and elaborated by human experience for the purpose of conserving business energy, the increasing volume and complexity of business transactions under modern conditions of intensified production have naturally led to various forms of simplified practice and the development of many ingenious devices by which the clerical labor of dealing with large masses of figures and elaborate computations is greatly reduced. Through one noteworthy advance in this direction, books and accounting records are now planned so that modern bookkeeping is largely conducted in summarized form, giving totals under controlling captions, in order to avoid the unnecessary labor of detailed ledger postings. Other recent inventions of great utility in lessening clerical expense include manifolding devices for both handwritten and typewritten records, by one of which, for example, records of shipping, billing and journalizing, which formerly were effected as separate operations, can now be produced simultaneously; loose-leaf records, card records and filing devices, applied especially to factory accounting, and various forms of calculating and tabulating machines through which involved computations can be made in a few seconds and by purely mechanical means that otherwise would require tedious and laborious figuring. Some of these combine calculating with typewriting mechanism in various ways with a great saving of time and effort, while certain statistical machines analyze, combine and tabulate with remarkable speed and certainty any required number of groupings of original facts concerning almost any class of transaction, and these are especially useful in cost calculations and sales statistics.

A graphic chart bears the same relation to figures that illustration bears to language; each detail in the picture is in its alloted place and in its exact relation and proportion to all other details of the picture. For demonstrating facts in a



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quantitative way, for recording facts in great variety and for computation whereby many mathematical processes can be performed without labor, a graphic chart is the best instrument that has yet been evolved, and it is being extensively adopted as a standard method for the promotion of greater efficiency in executive control. In presenting operating statistics through a graphic chart (a subject very clearly treated in recent publications by Codex Book Co., Inc., of New York, notably in Savage's "Graphic Analysis for Executives" and Haskell's Graphic Charts in Business"), a complete mental picture of all the facts expressed in the figures is visualized and conveyed without mental effort and without slighting important factors, and analysis of the results so presented is greatly facilitated. Unusual features are made apparent at once, and by the height and depth of the peaks and valleys variations in magnitude may be readily discerned and corrected. Charts furnish a continuous story of a business, produced through the process of connecting by a line the results for each period to the results for the preceding period, and they effectively demonstrate the essential principle of comparative measurement. Another significant feature of charts is that they bring out prominently any departure of a business from normal, since the salient facts are boldly set forth as the plotted line or curve is displayed beyond the normal field whenever results are abnormal.

Since the aim or purpose of all accounting reports, including those relating to costs, is to present the significant points of the story of the operations of the business in a manner to conserve the time of the busy executive, charts affording unique facilities for detecting defects in operation provide the readiest means for reporting unit costs, aggregate costs, production (by processes or departments) and sales and profits. With regard to budgetary control the various estimates, embracing sales, cost of sales, expenses, production, estimated cash receipts and estimated expenditures, must be prepared with adequate recognition of the interrelation of the various activities and of all the factors affecting them. Budget control charts not only enable an executive to determine the soundness of a budget before approving it, but they offer a continuing comparison between estimated, actual, and required results, and through them there may be presented in chart form a current analysis of the budget estimates in detailed comparison with actual results from period to period.

In thus briefly reviewing the character and scope of some of the principal resources of modern accounting, it becomes evident that through their systematic utilization the salient features of operation in any industrial organization can be currently and concisely set forth for the information of an executive, in such a form that no vital aspect of the things which are transpiring shall be obscured or overlooked.

Paper Mill Equipment Co. Incorporates

[FROM OUR REGULAR CORRESPONDENT]

PORTLAND, Ore., January 14, 1927.—The Paper Mill Equipment Company, Inc., incorporated January 1 with $3,000 common stocks and 150 shares, no par value, preferred stock. The new concern will handle paper mill and power plant machinery. Thomas C. Lovett, who is president, together with W. K. Phillips and William C. Ralston, are the incorporators. The company is located at 523-24 Northwestern Bank Building, Portland.

May Build Mill at Marshfield, Ore.

PORTLAND, Ore., January 14, 1927.—Paper mill interests of the Pacific Coast are said to be planning a construction program at Marshfield, Ore. W. D. Page, investment and loan agent of the Crocker National Bank of San Francisco, and V. Knight Sturges, a pulp and paper mill representative, are in Marshfield looking for a suitable site, and if such a location can be obtained, the Crocker National Bank will construct a plant.

Handbook of Northern Wood Industries

A new edition of "The Handbook of Northern Wood Industries," has just been issued by Svensk Trävarutidning, the Swedish Timber Journal.

The book which includes 658 pages contains data on Sweden, Norway and Finland. The part devoted to each country is divided into three sections, forestry, timber and wood pulp and paper.

The forestry section contains data on forest area annual increment, cutting and forest administration as well as information concerning forestry associations and organizations.

The timber section gives particulars on the sawmills in the respective countries, including the names, addresses, telephone numbers, etc., of the companies owning them, as well as production, shipping marks, foreign agents, etc. For Finland these data are given in a tabulated form.

The wood pulp and paper section furnishes data in a tabulated form on all wood pulp and paper mills in the respective countries, the addresses of the companies, the names of the leading men in each company, and particulars on the production.

In both the timber and the wood-pulp sections, all associations have been included together with their officers and members.

A new feature in the present edition is the special section entitled "Timber, Wood-Pulp and Paper Firms," containing the names of agents in these lines as well as exporters without mills of their own, arranged by countries, the division for each country beginning with data on the associations in these trades as well as their officers and members.

As it may be of importance to know which wood pulp and paper mills make a certain kind of pulp or paper, a register has been prepared grouping the mills under the following headings: Bleached sulphite, easy-bleaching sulphite, strong sulphite, bleached sulphate, easy-bleaching sulphate, grease-proof paper, parchment, writing paper, other kinds of paper, board and carton.

All registers include both Sweden and Norway as well as Finland.

In addition to this, a considerable part of the book has been devoted to advertisements, furnishing much useful information on those firms.

The handbook ends with a complete general register, containing both the names of companies and firms and the names of individuals, and in this register may be found practically all names of importance in the timber, wood pulp and paper industries both in the northern countries and abroad.

The price of the handbook is Kronor 20, including postage. It should be ordered from the Aktiebolaget Svensk Trävarutidning, 17 Kungsgatan, Stockholm, Sweden.

Changes in the Timken Roller Bearing Co.

Effective December 1, Paul Ackerman was appointed Engineer, Service Department, of The Timken Roller Bearing Company. All service work of the Automotive, Industrial and Steel Mill divisions will be coordinated under his direction. Headquarters will be maintained at Canton, Ohio.

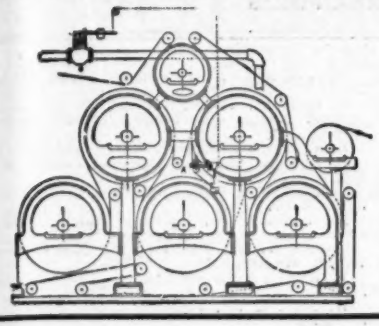
J. H. Ridge has been appointed Branch Manager of the Pittsburgh Branch of The Timken Roller Bearing Service & Sales Company.

G. G. Weston has been appointed Branch Manager of the Omaha Branch of The Timken Roller Bearing Service & Sales Company.

Mill Worker Injured

Frank Roman, millwright at the Neenah mill of the Kimberly-Clark Company, Neenah, Wis., suffered painful injuries to his back several days ago when he fell fifteen feet from a scaffold. He landed on a stairway below and is confined to the hospital with his injuries.

THE PICKLES DRYING REGULATOR



WE ARE SAFE IN OUR PROPOSITION

YOU'LL MAKE NO MISTAKE IN ACCEPTING IT

Pickles Drying Regulator

will do everything we claim for it and more. The test costs you nothing until you are satisfied. Many mills tried one and now have every machine equipped. Write for list of users and other information.

W. F. PICKLES **Buckland, Conn.**

Pointing out valve value

The Jenkins "Diamond" mark points out to an engineer a valve he can install with confidence. It identifies a genuine Jenkins—made by the original maker.

A genuine Jenkins means a valve made to the highest standards. The metal used is of the best, and is subjected to analyses by expert metallurgists before and after casting. Designs provide for strength where strength is needed, and each completed valve is tested to allow a wide safety margin before it leaves the Jenkins factory.

There's a genuine Jenkins for practically every valve requirement. At supply houses everywhere.

JENKINS BROS.

80 White Street.....New York, N. Y.
524 Atlantic Avenue.....Boston, Mass.
133 No. Seventh Street...Philadelphia, Pa.
646 Washington Boulevard....Chicago, Ill.

JENKINS BROS., Limited

Montreal, Canada London, England

Always marked with the "Diamond"

Jenkins Valves

SINCE 1864

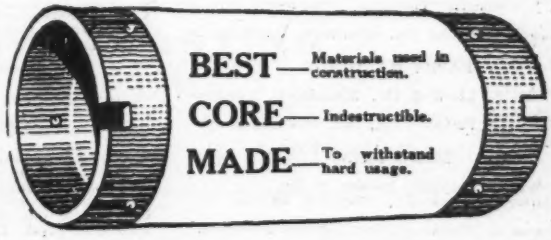
SHIPPING INSURANCE

The Use of

ELIXMAN CORES

protects your rolls and insures their delivery to your customer in perfect condition. They eliminate claims for damages.

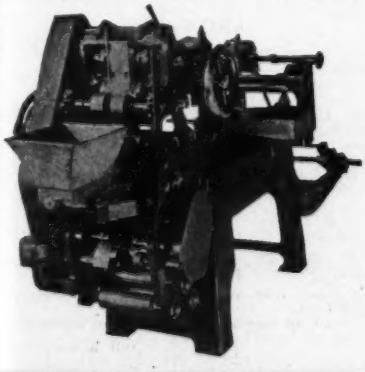
SHIPPING INSURANCE



Your two sources of supply are

Canadian Elixman Company
HAMILTON, ONTARIO

Elixman Paper Core Company
CORINTH, N. Y.



HIGHEST SPEED Paper Bag Machinery

Get My Quotations Before Placing Your Orders

Special Machinery Designed and Built

A. L. PARRISH,

1702 Robinson St., South Bend, Ind.

Imports of Paper and Paper Stock

NEW YORK, BOSTON, PHILADELPHIA AND OTHER PORTS

NEW YORK IMPORTS

WEEK ENDING JANUARY 22, 1927

SUMMARY

Cigarette paper .....138 cs.
Wall paper .....227 bls., 25 cs.
Paper hangings .....32 bls., 7 cs.
News print .....1,007 rolls
Printing paper .....8 bls., 43 cs.
Wrapping paper .....15 rolls, 4 bls., 9 cs.
Packing paper .....39 cs.
Kraft paper .....211 rolls
Stencil paper .....39 cs.
Baryta coated paper .....67 cs.
Gold coated paper .....5 cs.
Surface coated paper .....34 cs.
Decalcomania paper .....51 cs.
Pergamyn paper .....40 cs.
Cover paper .....2 bls., 2 cs.
Silk paper .....7 cs.
Parchment paper .....10 cs.
Tissue paper .....21 cs.
Drawing paper .....5 cs.
Filter paper .....163 cs.
Typon paper .....2 cs.
Straw board .....1,524 rolls
Miscellaneous paper..1,008 rolls, 438 bls., 226 cs.

CIGARETTE PAPER

Standard Products Corp., Pipestone County, Havre, 40 cs.
P. J. Schweitzer, Pr. Van Buren, Marseilles, 98 cs.

WALL PAPER

F. A. Binder, Stuttgart, Bremen, 133 bls., 2 cs.
F. J. Emmerich, Scythia, Liverpool, 4 bls.
A. C. Dodman, Jr., Inc., Scythia, Liverpool, 12 cs., 14 bls.
R. F. Downing & Co., Minnekahda, London, 40 bls., 5 cs.
F. J. Emmerich, Minnekahda, London, 5 bls., 1 ble.
F. J. Emmerich, Thuringia, Hamburg, 4 cs., 30 bls.
Phoenix Shipping Co., Thuringia, Hamburg, 2 cs.

PAPER HANGINGS

W. H. S. Lloyd & Co., Minnekahda, London, 32 bls., 4 cs.
Whiting & Patterson Co., Inc., Homeric, Southampton, 3 cs.

NEWS PRINT

E. Walker, Stuttgart, Bremen, 31 bls.
Maurice O'Meara Co., Stuttgart, Bremen, 42 rolls.
Parsons & Whittemore, Inc., Stuttgart, Bremen, 182 rolls.
The Times Co., Stockholm, Gothenburg, 78 rolls.
The Star Co., Stockholm, Gothenburg, 504 rolls.
Hudson Trading Co., Thuringia, Hamburg, 160 rolls.
F. Henjes, Jr., Inc., Thuringia, Hamburg, 41 rolls.

PRINTING PAPER

C. Steiner, Volendam, Rotterdam, 25 cs.
J. P. Heffernan Paper Co., Volendam, Rotterdam, 8 bls.
Japan Paper Co., Volendam, Rotterdam, 6 cs.
E. Dietzgen & Co., Maasdam, Rotterdam, 11 cs.
Phoenix Shipping Co., Thuringia, Hamburg, 1 cs.

WRAPPING PAPER

American Express Co., Stockholm, Gothenburg, 15 rolls.
C. Steiner, Volendam, Rotterdam, 4 bls.
E. Dietzgen & Co., Maasdam, Rotterdam, 9 cs.

PACKING PAPER

Steffens, Jones Co., Volendam, Rotterdam, 10 cs.
Steffens, Jones Co., Maasdam, Rotterdam, 14 cs.
Haule Wax Paper Manfg. Co., Thuringia, Hamburg, 15 cs.

KRAFT PAPER

Arkell Safty Bag Co., Stockholm, Gothenburg, 211 rolls.

STENCIL PAPER

Arlac Dry Stencil Co., Thuringia, Hamburg, 39 cs.

BARYTA COATED PAPER

Globe Shipping Co., Stuttgart, Bremen, 67 cs.

GOLD COATED PAPER

C. B. Richard & Co., Stuttgart, Bremen, 5 cs.

SURFACE COATED PAPER

Whiting & Patterson Co., Thuringia, Hamburg, 6 cs.
Hensel, Bruckman & Lorbacher, Thuringia, Hamburg, 6 cs.
L. Dejonge & Co., Thuringia, Hamburg, 22 cs.

DECALCOMANIA PAPER

C. W. Sellers, Stuttgart, Bremen, 14 cs.
C. W. Sellers, Thuringia, Hamburg, 6 cs.
B. F. Drakenfeld & Co., Scythia, Liverpool, 31 cs. (duplex).

PERGAMYN PAPER

F. C. Strype, Thuringia, Hamburg, 40 cs.

COVER PAPER

International Forwarding Co., Thuringia, Hamburg, 2 bls., 2 cs.

SILK PAPER

S. Gilbert, Blommersdyk, Rotterdam, 7 cs.

PARCHMENT PAPER

W. von Doorn, Volendam, Rotterdam, 10 cs.

TISSUE PAPER

F. C. Strype, Scythia, Liverpool, 21 cs.

DRAWING PAPER

H. Keeve Angel & Co., Inc., Minnekahda, London, 5 cs.

FILTER PAPER

H. Reeve Angel & Co., Inc., Minnekahda, London, 14 cs.
C. Schleicher Schull, Thuringia, Hamburg, 8 cs.
J. Manheimer, Homeric, Bordeaux, 94 cs.
E. Fougera & Co., Homeric, Bordeaux, 47 cs.

TYPON PAPER

Globe Shipping Co., Homeric, Southampton, 2 cs.

STRAW BOARD

A. Vuyk, Volendam, Rotterdam, 538 rolls.
A. Vuyk, Blommersdyk, Rotterdam, 139 rolls.
A. Vuyk, Maasdam, Rotterdam, 673 rolls.
Haas Bros., Maasdam, Rotterdam, 108 rolls.
Union Paper Co., Maasdam, Rotterdam, 32 rolls.
Flashlight Paper Tube Co., Maasdam, Rotterdam, 34 rolls.

MISCELLANEOUS PAPER

National Paper & Type Co., Tampa, Antwerp, 2 cs.
C. K. MacAlpine & Co., Stockholm, Gothenburg, 22 bls., 235 rolls.
M. M. Cohen, Stockholm, Gothenburg, 11 bls., 166 rolls.
The Borregaard Co., Inc., Stockholm, Gothenburg, 320 bls.
Universal Paper Co., Stockholm, Gothenburg, 509 rolls, 54 bls.
S. E. & M. Vernon, Inc., Stockholm, Gothenburg, 61 bls.
Arkell Safty Bag Co., Stockholm, Gothenburg, 98 rolls.
Wilkinson Bros. & Co., Inc., Stockholm, Gothenburg, 31 bls.
E. H. Sergeant & Co., Stockholm, Gothenburg, 6 cs.
International Forwarding Co., Volendam, Rotterdam, 35 cs.
Tamm & Co., Maasdam, Rotterdam, 8 cs.
International Forwarding Co., Maasdam, Rotterdam, 97 cs.
International Forwarding Co., Blommersdyk, Rotterdam, 35 cs.
P. E. Vernon & Co., Thuringia, Hamburg, 26 cs.
Zellerbach Paper Co., Thuringia, Hamburg, 1 cs.
Maurice O'Meara Co., Thuringia, Hamburg, 14 cs.
Japan Paper Co., Homeric, Southampton, 2 cs.

RAGS, BAGGINGS, ETC.

E. J. Keller Co., Inc., Tampa, Antwerp, 106 bls. bagging.
E. J. Keller Co., Inc., Tampa, Antwerp, 144 bls. rags.
P. Berlowitz, Tampa, Antwerp, 109 bls. rags.
Royal Manfg. Co., Tampa, Antwerp, 29 bls. rags.
D. I. Murphy, Tampa, Antwerp, 424 bls. rags.
E. J. Keller Co., Inc., Pipestone County, Dunkirk, 45 bls. rags.
Salomon Bros. & Co., Pipestone County, Dunkirk, 135 bls. rags.
Royal Manfg. Co., Pipestone County, Dunkirk, 40 bls. rags.
Castle & Overton, Inc., Pipestone County, Havre, 107 bls. bagging.
V. Galaup, Pipestone County, Havre, 105 bls. rags.
W. Steck & Co., Pipestone County, Havre, 33 bls. rags.
P. Berlowitz, Pipestone County, Havre, 338 bls. rags.
Atlas Waste Manfg. Co., Pipestone County, Havre, 47 bls. rags.
E. J. Keller Co., Inc., Stuttgart, Bremen, 133 bls. bagging.
A. W. Fenton, Inc., Stuttgart, Bremen, 92 bls. rags.
A. W. Fenton, Inc., Stuttgart, Bremen, 29 bls. bagging.
W. Schall & Co., Stuttgart, Bremen, 112 bls. rags.
Chase National Bank, Stuttgart, Bremen, 125 bls. rags.
E. J. Keller Co., Inc., Maasdam, Rotterdam, 44 bls. rags.
A. W. Fenton, Inc., Scythia, Liverpool, 17 bls. rags.
Mutnick Bros., Scythia, Liverpool, 63 bls. rags.
S. Birkenstein & Sons, Pan America, B. Aires, 12 bls. rags.
National City Bank, Cabo Espartel, Genoa, 79 bls. rags.
A. W. Fenton, Inc., Cabo Espartel, Barcelona, 109 bls. rags.
Castle & Overton, Inc., Cabo Espartel, Spain, 430 bls. old pickers.
V. Galaup, Thuringia, Hamburg, 50 bls. new cuttings.
American Over-Ocean Corp., Hague Maru, Kobe, 100 bls. rags.
Castle & Overton, Inc., Idaho, Newcastle, 86 bls. rags.
National Bank of Commerce, Blommersdyk, Rotterdam, 32 bls. rags.
Bulkley, Dunton & Co., Breedyk, ——, 144 bls. rags.
Castle & Overton, Inc., London Corp., Scotland, 72 bls. paper stock.
E. J. Keller Co., Inc., Holger, Bremen, 128 bls. rags.

OLD ROPE

Brown Bros. & Co., Stockholm, Gothenburg, 67 coils.
Brown Bros. & Co., Idaho, Hull, 260 coils.
N. Y. Trust Co., Blommersdyk, Rotterdam, 97 coils.

MANILA ROPE

Burshell Co., Ltd., Darian, Liverpool, 17 pkgs.
De Grauw Aymar & Co., Maasdam, Rotterdam, 165 bls.
Munson S. S. Line, Scythia, Liverpool, 13 bls.

HEMP ROPE

Bermuda West Indies S. S. Co., Darian, Liverpool, 5 coils.
Munson S. S. Line, Idaho, Newcastle, 24 pkgs.

CHINA CLAY

C. T. Wilson & Co., Bristol City, Bristol, 30 casks.

WOOD FLOUR

A. Kramer & Co., Inc., Maasdam, Rotterdam, 400 bags.
A. Kramer & Co., Inc., Blommersdyk, Rotterdam, 300 bags.
The Burnet Co., Innoko, Rotterdam, 718 bags, 34,980 kilos.

CASEIN

Kalbfleisch Corp., Pan America, B. Aires, 2,868 bags.
Atterbury Bros., Inc., Pan America, B. Aires, 525 bags.
National City Bank, Pan America, B. Aires, 2,800 bags.
Ritchie & Ramsay (Toronto), Pan America, B. Aires, 417 bags.

(Continued on page 66)

1864 1927

"EXCELSIOR" FELTS

for every grade of

PULP AND PAPER

We continue to maintain at the top the quality of Excelsior Felts, as we have done since we, as pioneers, made the first endless paper machine felts manufactured in America.

Seamless felts for fast running.
Satin Style felts for finish.
Special felts to meet every condition.
Send us your felt problems.

KNOX WOOLEN COMPANY
CAMDEN, MAINE

SOLD BY

BULKLEY, DUNTON & COMPANY

75-77 Duane St., N. Y., and direct

Prompt deliveries made from stocks in
NEW YORK
BOSTON
PHILADELPHIA
CHICAGO

TRADE U MARK

DYEINGS from Heller & Merz Colors attain the high standards you have set for your production. That is the logical result of the policy of this organization, which is to cooperate with clients in every way to secure and maintain excellence in their products.

The **HELLER & MERZ COMPANY**
505 Hudson St., New York

Boston, 287 Atlantic Ave. — Chicago, 146 W. Kinzie St. — Philadelphia, 114 Market St.

Springfield, Mass., 24 Lester Street

Factory—NEWARK, N. J.

ECONOMY IN PULP DRYING
FIDALGO SYSTEM

(Patented in Dominion of Canada, pending in U. S. and other countries.)

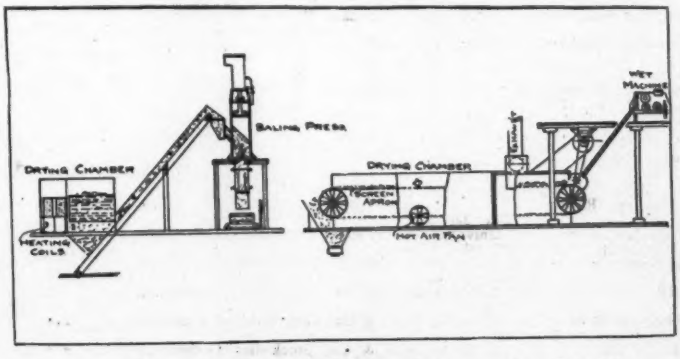
INVESTIGATE OUR INSTALLATIONS

3500 lbs. steam per ton air dry pulp.

Shredded, pressed and baled securely.

Can be wrapped if required.

BALES from 150 to 250 lbs. as required.



We furnish and install.

Double press Wet Machine, sectional Dryer.

Shredder
Baling press
motors and drive

Outline of Fidago System

Producing a compact air dry bale of Shredded Pulp. No injury to Fibre due to contact heated cylinder and saving in Beater horsepower and upkeep. Suitable rail or water shipment.

Small initial investment and low drying cost.

TECHNICAL ECONOMIST CORPORATION

40 RECTOR STREET, NEW YORK, N. Y.

CABLE HERENCO — TELEPHONE WHITEHALL 5243

Imports of Paper and Paper Stock

(*Continued from page 64*)

WOOD PULP

Scandinavian Pulp Agency, Inc., Stockholm, Gothenburg, 508 bls. sulphite pulp.
Scandinavian Pulp Agency, Inc., Stockholm, Gothenburg, 508 bls. kraft pulp.
Johanson, Wales & Sparre, Inc., Stockholm, Gothenburg, 350 bls. sulphite pulp.
Johanson, Wales & Sparre, Inc., Stockholm, Gothenburg, 449 bls. dry soda pulp.
E. M. Sergeant & Co., Stockholm, Gothenburg, 299 bls. dry soda pulp.
E. M. Sergeant & Co., Stockholm, Gothenburg, 1,117 bls. sulphite pulp.
Price & Pierce, Ltd., Stockholm, Gothenburg, 3,450 bls. wet pulp.
E. J. Keller Co., Inc., Maasdam, Rotterdam, 300 bls. wood pulp.
M. Gottesman & Co., Inc., Thuringia, Hamburg, 2,530 bls. sulphite pulp.
E. J. Keller Co., Inc., Blommersdyk, Rotterdam, 300 bls. wood pulp.
J. Anderson & Co., Agersund, Hernosand, 1,500 bls. sulphite pulp, 200 tons.
J. Anderson & Co., Agersund, Hernosand, 3,000 bls. sulphate pulp, 600 tons.
Buck, Kiaer & Co., Inc., Aggersund, Oslo, 3,600 bls. sulphite, 600 tons.
D. M. Hicks, Inc., Aggersund, Sikea, 600 bls. wood pulp, 100 tons.
M. Gottesman & Co., Inc., Aggersund, Sikea, 3,000 bls. wood pulp, 500 tons.
Price & Pierce, Ltd., Aggersund, Ohrviken, 1,800 bls. wood pulp, 304 tons.
Bulkley, Dunton & Co., Aggersund, ——, 3,300 bls. wood pulp, 660 tons.
Bulkley, Dunton & Co., Skiensfjord, ——, 8,975 bls. wood pulp.
Buck, Kiaer & Co., Inc., Tyrifjord, Oslo, 1,525 bls. sulphite.

PHILADELPHIA IMPORTS

WEEK ENDING JANUARY 22, 1927

L. H. Abenheimer, Hog Island, Marseilles, 173 bls. rags.
Phila. Girard National Bank, Hog Island, Naples, 205 bls. rags.
L. H. Abenheimer, Hog Island, Naples, 40 bls. rags.
Koyal Manfg. Co., Cabo Espartel, Genoa, 22 bls. cotton waste.
D. I. Murphy, Cabo Espartel, Genoa, 127 bls. rags.
F. Weber & Co., Cabo Espartel, Genoa, 24 cs. paper.
Atlantic Kefining Co., Cabo Espartel, Genoa, 6 cs. paper.
L. H. Abenheimer, Cabo Espartel, Marseilles, 139 bls. rags.
G. Milar & Co., Cabo Espartel, Marseilles, 68 bls. rags.
E. J. Keller Co., Inc., Cabo Espartel, Marseilles, 140 bls. rags.
S. Birkenstein & Sons, Cabo Espartel, Marseilles, 116 bls. rags.
E. J. Keller Co., Inc., Innoko, Rotterdam, 198 bls. rags.
D. M. Hicks, Inc., Hague Maru, Kobe, 50 bls. rags.
American Over-Ocean Corp., Hague Maru, Kobe, 100 bls. rags.
American Over-Ocean Corp., Hague Maru, Kobe, 50 bls. cotton waste.
Bulkley, Dunton & Co., Holger, ——, 1,335 bls. wood pulp.
Bulkley, Dunton & Co., West Campgaw, ——, 71 bls. rags.
Castle & Overton, Inc., Pennsylvania, France, 65 bls. rags.
Castle & Overton, Inc., Sacandaga, Antwerp, 191 bls. rags.
Castle & Overton, Inc., Sac City, Antwerp, 123 bls. rags.
E. J. Keller Co., Inc., Carnia, Algiers, 308 bls. rags.
E. J. Keller Co., Inc., Pennsylvania, Havre, 208 bls. rags.
E. J. Keller Co., Inc., Pennsylvania, Havre, 84 bls. bagging.

NEWPORT NEWS IMPORTS

WEEK ENDING JANUARY 22, 1927

Scandinavian Pulp Agency, Inc., Minnequa, Hernosand, 3,600 bls. sulphite, 600 tons.

BALTIMORE IMPORTS

WEEK ENDING JANUARY 22, 1927

National City Bank, Hog Island, Genoa, 36 bls. rags.
Chase National Bank, Hog Island, Leghorn, 508 bls. rags.
Acer & Co., L. A. Christensen, Woodfibre, 19,040 bls. sulphite pulp.
Pagel, Horton & Co., Inc., Minnequa, Obbola, 21,000 bls. sulphate, 3,000 tons.
Pagel, Horton & Co., Inc., Minnequa, Husum, 1,200 bls. sulphate, 200 tons.
Pagel, Horton & Co., Inc., Minnequa, Husum, 2,250 bls. sulphite, 375 tons.
Buck, Kiaer & Co., Dania, Oslo, 1,500 bls. sulphite.
Bulkley, Dunton & Co., Argosy, ——, 1,800 bls. wood pulp.
Bulkley, Dunton & Co., Holstein, ——, 540 bls. wood pulp.
Bulkley, Dunton & Co., Kolsnaren, ——, 3,000 bls. wood pulp.
Bulkley, Dunton & Co., Stal, ——, 2,996 bls. wood pulp.
E. J. Keller Co., Inc., Singapore Maru, Hamburg, 649 bls. wood pulp.

BOSTON IMPORTS

WEEK ENDING JANUARY 22, 1927

National Shawmut Bank, Pipestone County, Dunkirk, 165 bls. rags.
L. H. Abenheimer, Pipestone, Havre, 46 bls. rags.
State Bank, Pipestone, Havre, 75 bls. rags.
V. Galaup, Pipestone, Havre, 191 bls. rags.
Textile Waste Supply Co., Pipestone, Havre, 22 bls. rags.
E. Mayer, Pipestone, Havre, 25 bls. rags.
L. H. Abenheimer, Pipestone, Havre, 69 bls. rags.
Bulkley, Dunton & Co., Kolsnaren, ——, 750 bls. wood pulp.
Bulkley, Dunton & Co., Wanja, ——, 3,125 bls. wood pulp.
Castle & Overton, Inc., West Arrow, Belgium, 113 bls. rags.
E. J. Keller Co., Inc., West Campgaw, Copenhagen, 103 bls. rags.

PORTLAND, ME., IMPORTS

WEEK ENDING JANUARY 22, 1927

J. Anderson & Co., Aggersund, Hernosand, 2,500 bls. sulphate pulp, 500 tons.
J. Anderson & Co., Aggersund, Stugsund, 500 bls. sulphite pulp, 100 tons.

Samuel Dennis Warren Dead

[FROM OUR REGULAR CORRESPONDENT]

BOSTON, Mass., January 25, 1927.—Samuel Dennis Warren, for some time identified with the S. D. Warren Company, paper manufacturers, but for the past two years associated with the Endowment Fund of Harvard University, working in association with Mr. Hamlin, died on Tuesday morning of last week after a short illness at his home, 261 Marlboro street.

Samuel Dennis Warren was born in Boston, November 25, 1885. His parents were the late Samuel Dennis Warren and Mabel Ashton (Bayard) Warren. He prepared for college at Milton Academy and entering Harvard was graduated with the class of '08.

During his college days he was interested in athletics, especially football and rowing, and was on the freshman crew, and he always kept up his interest in this latter-named sport.

Following his graduation, Mr. Warren went to work at Cumberland Mills, Me., where was located the largest paper mill owned by S. D. Warren & Co., which concern was established by Mr. Warren's father. After working there for a year he went abroad, traveling on the continent and in England, during which time he made a close study of the paper mills in Germany, Austria, France, England and Scotland. In November, 1909, he again went to work in a paper mill, this time in Germany in a small town called Bergisch-Gladbach, six miles from Cologne, where he stayed for three months, returning to this country at the end of January, 1910, and resuming his association with S. D. Warren & Co., of which he became a partner in 1912. When the business was incorporated as the S. D. Warren Company, Mr. Warren became secretary, holding this position until he accepted the Harvard post two years ago.

On January 11, 1909, Mr. Warren was married to Miss Helen Thomas at Pride's Crossing. Mrs. Warren survives together with three children, Helen Warren, Anne Warren, and Samuel D. Warren, Jr.

Boston Paper Market Conditions

[FROM OUR REGULAR CORRESPONDENT]

BOSTON, Mass., January 20, 1927.—Bonds and ledgers are moving well for this period of the year. In some quarters a general lull is reported after the stock-taking period. Mills making bonds and ledgers seem fairly busy. A good tonnage of box boards has been booked so far this month and the outlook is apparently favorable in this line. The price advance of $2.50 on the lower grades of box board went into effect last week. No great change is noted in the paper stock market for the week.

Cleveland Gear Co. Opens Detroit Office

DETROIT, Mich., January 17, 1927.—The Cleveland Worm and Gear Company, 3249-99 East 80th street, Cleveland, Ohio, has established a district sales office in Detroit, Mich. The address is 2600 Buhl Building, Detroit, and H. A. Sparrow is in charge as district manager. This office will serve the lower peninsula of Michigan and handle all matters pertaining to the application of the standard industrial worm gear reduction unit manufactured by the company.

HGCO

H. G. CRAIG & CO., Inc.

Paper Merchants

(Since 1868)

News
Hanging
Tissues
Box Board
Wood Pulp
Specialties
Mill Supplies

17 East 45th St. NEW YORK, N. Y.

For Greater Economy
Without Sacrificing Quality

Use

ALPHA FIBRE

Our new product — which takes the place of rags in paper-making

Inquiries from the trade are welcomed

FINE PAPERS CALL *for* FINE PULPS
We Have Them

BROWN COMPANY

founded 1852
PORTLAND, MAINE

NEW YORK CITY
Woolworth Bldg.

CHICAGO
110 So. Dearborn St.

Paper Cutters

Single, Duplex and Diagonal

CUTTER KNIVES PATENT TOP SLITTER

HAMBLET MACHINE CO.

LAWRENCE MASS.

E. J. KELLER COMPANY
INCORPORATED

200 FIFTH AVENUE
NEW YORK

PAPER MAKERS' SUPPLIES

We beg to announce that we have been appointed sole selling agents in the United States for the well-known

ROSENBERGER
and
ZILINA

Wood Pulps, which we are now in position to offer to the trade.

New York Market Review

Office of THE PAPER TRADE JOURNAL,
Wednesday, January 26, 1927.

Continued improvement was experienced in the local paper market during the past week. The various grades of paper were in excellent demand and prices are still holding up very well. Reports from the sales organizations of the leading paper houses are generally optimistic and the buying movement is expected to be in full swing within a short time.

News print continues in heavy demand and a further expansion in consumption is predicted by many observers for the near future. A pleasant feature of the market is the manner in which the increased production is being absorbed by the publishers. There is no undue accumulation of stocks and the position of the industry is generally sound.

Some improvement has been noticed in the paper board market. Now that the inventory period is practically over, it is expected that production will be speeded up, as a better demand is anticipated in the near future. Conditions in the fine paper market are satisfactory and prices are being well maintained. The coarse paper market is steady and wrapping paper is in excellent request.

Mechanical Pulp

Trading in the ground wood market was fairly active during the past week. Producers are not believed to have any great amount of surplus stock to offer in the open market, and spot prices are consequently firm. Shipments are moving into consumption at a normal rate. Judging by the number of inquiries in the market for future business the market should become livelier in the near future.

Chemical Pulp

No radical changes were recorded in the chemical pulp market during the past week. Both domestic and imported producers are reported to be sold well ahead, and, with the closing of navigation on the Baltic, the market is exhibiting greater steadiness. Quotations, in most instances, are being maintained at the recently reported levels.

Old Rope and Bagging

The paper mills are displaying more interest in old rope and bagging than for some time and it is believed that many manufacturers will shortly be in the market to replenish their stocks. Just at present most of the business being transacted is along routine lines, but prices are holding up to former levels, shading being infrequent.

Rags

Imported rags are in better request, but, due to the heavy demand experienced abroad, prices are still rather higher than normal. Roofing rags continue active. The mill demand for domestic rags has been rather restricted of late, but now that the inventory season has ended, a general improvement in conditions may set in at any time.

Waste Paper

Lower grades of waste paper are in better demand from the board mills. As usual at this season of the year, collections are below normal, and prices are fairly steady, considering all the circumstances. There is an improved request for book stock, and old kraft paper is also moving in a satisfactory manner. Dealers are looking for an increased buying movement very shortly.

Twine

Business in the twine market during the past week was mostly along routine lines. Prices of most grades are being maintained at recently quoted levels. There has been some talk of concessions, but little change is anticipated in the market while the demand for wrapping paper keeps up.

Creditors of Maurice O'Meara Co. Meet

The Maurice O'Meara Company, dealers in paper mill supplies, of 448-452 Pearl street, New York, called a meeting of their larger creditors on Monday afternoon at the offices of Ridgway, Ridgway & Slote, attorneys, 41 Park Row, New York, for the purpose of discussing their present financial condition. There were in attendance at this meeting approximately 35 creditors.

After a complete statement of the financial condition of the company and its future possibilities, a committee was appointed for the purpose of discussing ways and means of continuing the business, if possible, and if not, to consider the best method of liquidation for the benefit of the creditors. The committee appointed consisted of the following: M. Gintzler, of the Pulp and Paper Trading Company, chairman; Mr. Begley, an attorney representing P. Garvan, Inc., and Robert O'Neil; Mr. Quinby, of the Allied Paper Mills; Mr. Dorman, of the Champion Coated Paper Company; Mr. Northrup, of the Albemarle Paper Manufacturing Company; Mr. Childs, of H. Reeve, Angel & Co.; Mr. Cadogan, of the Cuneo Eastern Press; Mr. Faunce, of Price & Pierce, Ltd.; Mr. Brennan, of the North End Paper Company; Mr. Galewitz, of the Great Atlantic Paper Company, and Mr. Pleasants, an attorney, representing E. J. Cole & Co.

All of the creditors present at the meeting agreed that it was to the best interests of all concerned that no action be taken by any creditor to precipitate the matter into the insolvency courts, at least until the committee had an opportunity to consider the matter from every angle and report back to the creditors. The committee arranged to meet again yesterday afternoon, Wednesday, to discuss definite plans.

New Fourdrinier for Paper Company

WATERTOWN, N. Y., January 24, 1927.—Bagley & Sewall company of this city will construct a 136-inch Fourdrinier for the Columbia River Paper Company of Vancouver, Wash., it was learned last week.

Negotiations for the sale of the machine to the Western company have been under way for some time and have just been completed. The machine is the second built by the local company for the Columbia River concern. It is to be used in the manufacture of tissue annd grease-proof papers.

Forestry Association To Meet at New Haven

NEW HAVEN, Conn., January 25, 1927.—The American Forestry Association and the Connecticut Forestry Association will hold their joint annual meeting at the New Haven Lawn Club in this city, Friday and Saturday, January 28 and 29.

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WALDRON

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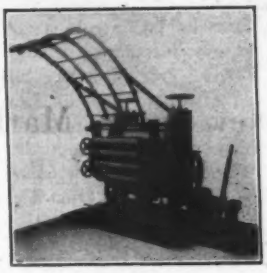

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Chesapeake Corporation, West Point, Va.
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International Paper Company, Bastrop, La.
Tennessee Paper Mills, Chattanooga, Tenn.
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Miscellaneous Markets

Office of THE PAPER TRADE JOURNAL,
Wednesday, January 26, 1927.

Satisfactory conditions prevailed in the local chemical market during the past week. Shipments against contract continue to move in heavy volume. Production is generally being keyed up to run a little ahead of consumption. An excellent amount of contract business has already been booked for the current year, and prices, in most instances, are holding up to schedule.

BLANC FIXE.—Trading in the blanc fixe market was quite active during the past week. Both the pulp and the powder were in good request and a good number of inquiries are being received for future business. No further price changes have been recorded. The pulp is quoted at from $60 to $65 a ton, in bulk, and the powder is offered at from 4 cents to 4½ cents a pound, in barrels, at works.

BLEACHING POWDER.—Demand for bleaching powder is quite active and the market is in a sound position. Contract withdrawals are proceeding at a good pace. Prices are holding up very well to the formerly quoted basis. Bleaching powder is selling at from $2 to $2.40 per 100 pounds, in large drums, at works, according to quantity and size of order.

CASEIN.—Both domestic and imported casein is in better demand and the market is exhibiting a firmer tendency. The quotation for imported casein now ranges from 16 cents to 16½ cents a pound. Domestic casein is selling at from 15½ cents to 16½ cents per pound, all in bags, car lot quantities.

CAUSTIC SODA—Steadiness prevails in the caustic soda market, and the demand for this product at present is quite lively. Most of the normal contract business for the current year, has already been closed. Caustic soda is still quoted at from $3 to $3.10 per 100 pounds, in large drums, at works; and spot car lots at $3.20 per 100 pounds.

CHINA CLAY.—Most of the business transacted in the china clay market during the past week was for immediate requirements. Prices are practically unchanged. Imported china clay is still quoted at from $15 to $25 a ton, in bulk, ship side. Domestic washed clay is still selling at from $8 to $9 a ton, at mine, and pulverized at $10 a ton.

CHLORINE.—The chlorine market is exhibiting a strong undertone. Contract shipments are moving in good volume and considerable new business is being booked. Chlorine is quoted at 4 cents a pound, in tanks, or multi-unit cars, at works, on contract orders. The spot price ranges from 4½ cents to 4¾ cents a pound.

ROSIN.—Some improvement appears to be developing in the rosin market. This product is in better demand and prices are much firmer. At the naval stores, the grades of gum rosin used in the paper mills, have advanced to from $12.70 to $12.95 per 280 pounds, ex dock, in barrels. Wood rosin is now quoted at $10 per 280 pounds, in car load lots, at southern shipping points.

SALT CAKE.—While the salt cake market is a little easier, there have been no radical changes in prices. Supplies are limited, however, and taking everything into consideration, salt cake is in a sound position. Salt cake is quoted at from $18 to $20 a ton, in bulk, at works. Chrome salt cake is selling at from $14 to $15 a ton.

SODA ASH.—Shipments of soda ash continue to go forward in excellent volume. Most of the contract business for the current year has already been booked. Some substantial sales have also been transacted in the spot market lately. Contact quotations, in car lots, at works, per 100 pounds, are as follows: in bags, $1.32½, and in barrels, $1.57½.

STARCH—Demand from the paper mills for starch continues active. Contract withdrawals are moving into consumption in a satisfactory manner. Prices remain unchanged at the recently quoted level. Special paper makers' starch is still offered at $3.22 per 100 pounds, in bags, and at $3.39 per 100 pounds, in barrels.

SULPHATE OF ALUMINA.—Demand for sulphate of alumina is well sustained and shipments of this product are moving into consumption at a good pace. Prices are holding up very well. Commercial grades of sulphate of alumina are quoted at from $1.40 to $1.45, in bags, at works, in car lots. The iron free is offered at from $2 to $2.05 per 100 pounds, at works.

SULPHUR.—The sulphur market is in a strong position and quotations are being maintained in a satisfactory manner. Contract withdrawals are well up to average for this time of the year. An excellent volume of inquiries are also being received for future business. Sulphur is still selling at from $18 to $19 a ton, in bulk, at mine.

TALC.—Manufacturers of talc are maintaining the schedule of prices which has prevailed for some time past, and are experiencing a steady demand from the paper mills. The quotations on domestic talc range from $16 to $18 a ton, at eastern mines; while French talc is quoted at from $18 to $22 a ton, ship side.

Boston Paper Stock Market Conditions

[FROM OUR REGULAR CORRESPONDENT]

BOSTON, Mass., January 24, 1927.—The market for paper stock, according to reports in the trade, has not been particularly lively during the last week, although prices on most grades have remained fairly steady. The volume of sales on old rags is small. Holyoke mills are not buying much now, says a representative of a Boston house who was recently in that city. Ganzies, thirds and blues, and No. 1 old white are not moving much, although one well known company has been buying ganzies. It is stated that every time packers try to produce a sale they bear down the price. One house, however, sold a quantity of foreign consigned old rags which had been on hand for fifteen months.

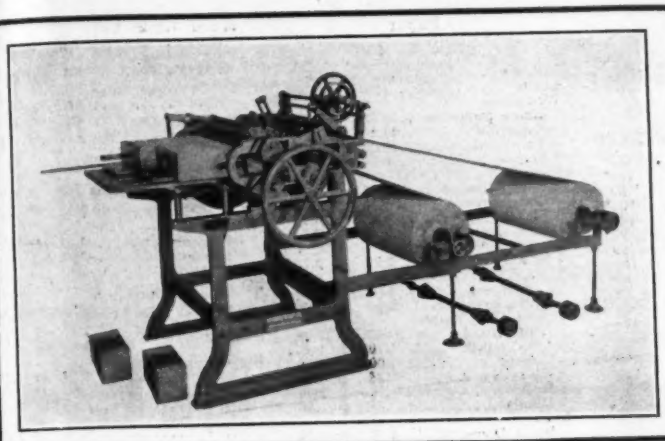
A paper stock man in this city in discussing the situation says that he doesn't see how the mills can keep out of the new rag market and keep them running as they are. The same man takes up the point of responsibility for the condition of new rags when they reach the mills, as there has been more or less of a disagreement between buyer and seller. He says the mills are not willing to take the responsibility in regard to grading. The packer, who is generally a conscientious man, tries to put up the kind of rags he sells. If anything happens to be found in the stock which doesn't belong there the mills reject it so that the packer has to carry the bag.

For instance, the presence of rubber in the stock is objectionable. It is stated that the particles of rubber are so small that it is difficult to eliminate them. One trouble with this matter is that any chemical which destroys the rubber destroys the rag also. Anyone who can devise a process for getting the rubber out which would not injure the rag will find that the process would be of immense value of the trade. Another difficulty lies in the fact that most of the colored materials that are fast are objectionable to the paper mills. A chemical strong enough to bleach out the color destroys the fibre also. The red stripe in some of the denim or overall cloth is objectionable to the mills. Sometimes it gets to the paper manufacturer, who rejects the stock.

When there is a high market and a shortage of stock, the rags are always accepted without a protest, but on a falling market, it is claimed, the mills are prone to reject the lot if the rags seem at all unsatisfactory. The Boston paper stock man says that the paper manufacturers seem to forget that they are not buying a gilt-edged article, but refuse.

In England, and on the Continent, the mills assume the responsibility for sorting, following the same custom as they did years ago. This plan was formerly followed in this country, but the change came with the advent of the efficiency expert, it is maintained.

This matter is one which calls for a remedy to right what is regarded as radically wrong in the marketing of rags today. The paper stock man feels that it would be a good thing if the producers of rag stock and buyers of rag stock would get together, thresh the matter out, and in that way help each other.



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Also Special Paper Goods Machines.

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A FIRST REQUISITE

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Ample Reserves

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TEXAS GULF SULPHUR CO.

41 E. 42nd Street New York City

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AMERICAN MADE FOR AMERICAN TRADE

Some portion of our clay production is *pulverized*. That part of it which is *pulverized* is, as far as we know, the only *pulverized clay* which is washed and refined before being pulverized. This insures greater freedom from impurities and an exceedingly uniform product.

Prices of M-E pulverized clay may surprise you even considering this additional treatment.

Let us submit samples and quote you.

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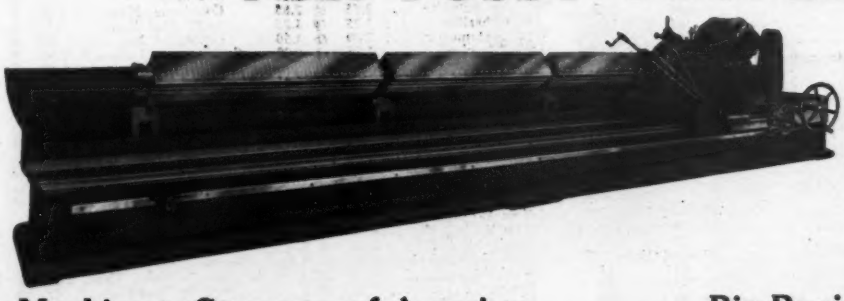


If you want your grinding "Just So," and want it just so all the time, the new massive construction stationary knife bar grinders will do it just that way, and keep at it year after year.

And they are the most economical in the long run. They require less floor space, less power, less looking after. They are full automatic and accurate to the highest degree.

The above illustration shows a magnetic chuck installation of especially large capacity, for one or several knives up to 220" long.

Machinery Company of America **Big Rapids, Mich., U. S. A.**

Market Quotations

Quoted by Hepburn & Co., 74 Broadway, N. Y. City, to whom all inquiry for quotations on these or any other Securities is referred.

BONDS	BID	OFFERED
Advance Bag & Paper, 7s 1943	100	103*
A. P. W. Pulp & Power, 7s 1945	103	106*
American Writing Paper, 6s 1947	79	82
Bastrap Pulp & Paper, 6½ 1940	98	101*
Bedford Pulp & Paper, 6½ 1942	97	100*
British Columbia Pulp & Paper, 6s 1950	80	90*
Beaver Products Corp., 7½s 1942	106	109
Bedford Pulp & Paper, 6½s 1942	95	100
Berkshire Hills Paper, 8s 1941	60	80
Brown Paper Co., 1st 5½s 1946	94	98
Bryant Paper Co., 6s 1942	98	102
Cape Breton Pulp & Paper, 6s 1932	101	103
Central Paper Serial 6, 6½s 1942	89	...
Champion Coated Paper, 6s 1926 to 1932	98	...
Champion Fibre, 8s 1930	100	...
Champion Paper Corp'n, 1st 6s 1945	94	97
Continental Paper Products, 6½s 1943	88	91½
Cornell Wood Prod., 7½s 1937	100	104*
Crown Willamette Paper, 6s 1951	97	101
Donnaconna Paper, 6s 1940	100	102
Della Paper & Pulp Serial, 6s 1926-38	*95	...
Eastern Mfg. Co., 7s 1938	91¼	93
Eddy Paper, 7½s 1931	99	102
Escanaba Paper Serial, 6s 1926-39	90	95
Filer Fibre Serial, 7s 1926-39	75	95
Fort Orange Paper, 7s 1942	95	100*
Fox River Paper, 7s 1931	99	...
Gair Co. (The Robt.) 7s 1937	102	105
Gilbert Paper Co., 6½s 1926-29	99	...
Hammermill Paper, 6s 1939	100	103*
Itaska Paper & Prairie River Power J+5½s 1926-38	94	96*
Itaska Paper 1st, 6s 1933-38	96	98*
Kalamazoo Veg. Parchment, 6s 1938	98	...
Lake Superior Pulp & Paper, 6s 1941	102	105*
Marinette & Menominee, 7½s 1936	101	...
Menasha Printing & Carton, 6½s 1939	99½	...
Mengel Company, 7s 1926 to 1934	100*	102
Miami Paper, 7½s 1931	98	...
Monroe Paper Products, 7½s, 1932	96	...
Nekoosa Edwards, 1st Ref. 6s 1928 to 1942	96	99*
Orono Pulp & Paper, 6s 1943	98	...
Orono Pulp & Paper, 5s 1941	94	...
Oswego Falls Corp., 6s 1941	98	100*
Oswego Falls Corp., 6s 1941	95*	100
Oxford Paper, 6s 1947	100	...
Paepcke Paper Mills, 7s 1930	99	...
Parsons Pulp & Lumber, 7s 1928	97	...
Parker Young Co., 6½s 1944	95	99
Paterson Parchment Paper, 6s 1938	101½	...
Penobscot Chemical Fibre, 6s 1942	98	...
Peshtigo Paper, 7s 1942	50	75
Poland Paper, 7s 1930	98	...
Port Alfred Pulp 6½s 1943	*96	...
Richardson Co., 6s 1938	97	...
Spanish River Pulp & Paper, 8s 1941	106	110
Stevens & Thompson Paper, 6s 1942	89	93
St. Croix Paper, 5s 1926-37	95	98*
St. Regis Paper Serial, 6½s 1926-35	98½	...
Tait Paper & Color Industries, 6s 1934	90	...
Taggart Bros. Co., 6s 1944	97	100*
Ticonderoga Pulp & Paper, 5s 1930	90	95*
Ticonderoga Pulp & Paper, 6s 1940	98	100*
Warren (The S. D.) Company, 6s 1945	98	101
Wotab Paper, 6½s 1943	99	103
Westfield River Paper, 7s 1926-43	Wanted	...
Whittaker Paper, 7s 1942	103	106
Witmer-Parsons Pulp & Lbr. (Units)	55	65*

STOCKS	BID	ASKED
Advance Bag & Paper 8% Pfd.	94	98*
Brompton Pulp & Paper 8% Pfd.	93	98*
Brown Corpn., 7% Pfd.	97	100*
Bryant Paper, Com.	11	13
Bryant Paper, Pfd.	9	11
Champion Fibre 7% Pfd.	99	103*
Consolidated Paper, Common	14	...
Diem & Wing, 7% Cum. Pfd.	90	93*
Donnaconna Paper, Com.	49	54
Donnaconna Paper, Pfd.	95	100
Eastern Mfg. Co., 1st Pfd.	34	37
Great Northern Paper, Cap.	285	305
Hammermill Paper, 7% Pfd.	105	110
Hinde & Dauch, Com.	135	...
Hinde & Dauch, Pfd.	100	...
Marathon Paper Mills, Com.	125	...
Louis DeJonge Co., 7% Pfd.	93	96
Munissing Paper, Com.	12	15*
New York & Penna. Co.	Wanted	None Off.
Oxford Papers, Com.	102	...
Oxford Paper Co., Pfd.	100	105
Penobscot Chemical Fibre, Com.	65	75*
Richardson Co., 7% Pfd.	103	...
Rubberoid Company	80	90
Seaman Container, Class B (par $1)	1	None Off.
Seaman Paper Co.	Wanted	None Off.
St. Croix Paper	150	170
St. Regis Paper Co., 7% Cum. Pfd.	97	100
Westfield River Paper Co., 1st Pfd.	Wanted	None Off.
West Virginia Pulp and Paper, Com.	58	63
West Virginia Pulp and Paper, Pfd.	97	102
Whittaker Paper, 7% Cum. Pfd.	99	103

* Nominal.

Paper

(F. o. b. Mill)

Ledgers	11.00	@38.00
Bonds	9.00	@45.00
Writings—		
Extra Superfine	14.00	@32.00
Superfine	14.00	@32.00
Tub sized	10.00	@15.00
Engine Sized	8.00	@11.00
News—		
Rolls, contract	3.25	@ —
Rolls, transit	3.30	@ 3.50
Sheets	4.00	@ 4.25
Side Runs	3.00	@ 3.75
Book, Cased—		
S. & S. C.	7.00	@ 9.75
M. F.	6.25	@ 8.75
Coated and Enamel	8.00	@15.00
Lithograph	8.00	@15.00
Tissues—Per Ream—		
White No. 1	.80	@ 1.00
Anti-Tarnish	1.10	@ 1.90
Colored	1.00	@ 2.00
White No. 2	.75	@ .85
Kraft	.90	@ 1.00
Manila	.75	@ .85
Kraft—		
No. 1 Domestic	6.25	@ 6.50
No. 2 Domestic	5.25	@ 5.50
Southern	4.75	@ 5.25
Imported	6.50	@ 7.00
Manila—		
No. 1 Jute	9.00	@ 9.25
No. 2 Jute	7.75	@ 8.50
No. 1 Wood	4.75	@ 5.25
No. 2 Wood	4.00	@ 4.50
Butchers	3.75	@ 4.25
Fibre Papers—		
No. 1 Fibre	5.00	@ 5.50
No. 2 Fibre	4.75	@ 5.25
Common Bogus	2.75	@ 3.00
Screenings	3.00	@ 3.25
Card Middles	4.00	@ 5.00
Boards—per ton—		
News	42.50	@45.00
Straw	57.50	@60.00
Chip	40.00	@42.50
Binders' Boards	70.00	@75.00
Sgl. Mla. Ll. Chip.	52.50	@55.00
Wood Pulp	67.50	@72.50
Container	55.00	@57.50
Glassine—		
Bleached, basis 25 lbs	13.00	@16.00
Bleached, basis 20 lbs.	15.00	@16.00

Mechanical Pulp

(Ex-Dock)

No. 1 Imported—		
Moist	36.00	@38.00
Dry	38.00	@40.00
(F. o. b. Mill)		
No. 1 Domestic	30.00	@32.00
Screenings	15.00	@20.00

Chemical Pulp

(Ex-Dock, Atlantic Ports)

Sulphite (Imported)—		
Bleached	3.75	@ 4.50
Easy Bleaching	3.20	@ 3.35
No. 1 strong unbleached	2.95	@ 3.05
Mitscherlich unbleached	3.00	@ 3.40
No. 2 strong unbleached	2.85	@ 2.90
No. 1 Kraft	2.90	@ 3.05
Sulphate—		
Bleached	3.75	@ 4.00
(F. o. b. Pulp Mill)		
Sulphite (Domestic)—		
Bleached	3.65	@ 4.75
Easy Bleaching Sulphite	3.00	@ 3.25
News Sulphite	2.65	@ 2.85
Mitscherlich	3.25	@ 3.75
Kraft (Domestic)	3.00	@ 3.50
Soda Bleached	3.75	@ 4.00
Sulphate Screenings—		
Coarse	.75	@ .85
Refined	1.75	@ 2.00

Domestic Rags

New Rags

Prices to Mill f. o. b. N. Y.

Shirt Cuttings—		
New White, No. 1	11.00	@11.50
New White, No. 2	7.50	@ 8.00
Silesias No. 1	7.00	@ 7.50
New Unbleached	10.50	@11.00
Washables	4.25	@ 4.75
Fancy	5.25	@ 5.75
Blue Overall	7.00	@ 7.50
New Blue Prints	5.25	@ 5.50
New Soft Blacks	4.00	@ 4.25
Mixed Khaki Cuttings	4.25	@ 5.00
Pink Corset Cuttings	9.50	@10.00
O. D. Khaki Cuttings	5.25	@ 5.75
Men's Corduroy	4.00	@ 4.50
New Mixed Blacks	3.50	@ 3.75

Old Rags

White, No. 1—		
Repacked	5.50	@ 6.00
Miscellaneous	4.75	@ 5.25
White, No. 2—		
Repacked	3.25	@ 3.75
Miscellaneous	2.75	@ 3.00
St. Soiled, White	2.50	@ 2.75
Thirds and Blues—		
Repacked	2.25	@ 2.50
Miscellaneous	1.75	@ 2.00
Black Stockings	3.25	@ 3.75
Roofing Rags—		
Cloth Strippings	1.60	@ 1.70
No. 1	1.60	@ 1.70
No. 2	1.35	@ 1.45
No. 3	1.10	@ 1.15
No. 4	1.10	@ 1.15
No. 5A	.95	@ 1.05

Foreign Rags

New Light Silesias	6.75	@ 7.25
Light Flannelettes	7.50	@ 8.00
Unbleached Cottons	9.50	@10.50
New White Cuttings	10.00	@11.00
New Light Oxfords	7.00	@ 7.50
New Light Prints	5.50	@ 6.50
New Mixed Cuttings	3.00	@ 3.50
New Dark Cuttings	2.75	@ 3.25
No. 1 White Linens	7.00	@ 7.75
No. 2 White Linens	5.00	@ 5.50
No. 3 White Linens	4.00	@ 4.50
No. 4 White Linens	3.00	@ 3.50
Old Extra Light Prints	2.75	@ 3.00
Ord. Light Prints	2.25	@ 2.50
Med. Light Prints	1.85	@ 2.10
Dutch Blue Cottons	2.25	@ 2.50
German Blue Linens	2.25	@ 2.50
German Blue Cottons	2.00	@ 2.25
Checks and Blues	1.75	@ 2.00
Lindsay Garments	1.80	@ 1.90
Dark Cottons	1.70	@ 1.80
Shoppery	1.50	@ 1.60
French Blues	2.25	@ 2.50

Old Rope and Bagging

Prices to Mill f. o. b. N. Y.

Gunny No. 1—		
Foreign	1.65	@ 1.85
Domestic	1.75	@ 1.95
Wool Tares, light	1.75	@ 1.85
Wool Tares, heavy	1.75	@ 1.85
Bright Bagging	1.70	@ 1.80
Small Mixed Rope	1.50	@ 1.65
Manila Rope—		
Foreign	3.75	@ 4.00
Domestic	4.75	@ 5.00
New Burlap Cut	3.00	@ 3.25
Hessian Jute Threads—		
Foreign	3.50	@ 4.00
Domestic	3.25	@ 3.50

Old Waste Papers

(F. o. b. New York)

Shavings—		
Hard, White, No. 1	3.50	@ 3.75
Hard, White, No. 2	3.20	@ 3.30
Soft, White, No. 1	2.90	@ 3.10
Flat Stock—		
Stitchless	1.20	@ 1.30
Overissue Mag.	1.20	@ 1.30
Solid Flat Book	1.15	@ 1.20
Crumpled No. 1	.80	@ .90
Solid Book Ledger	1.90	@ 2.10
Ledger Stock	1.45	@ 1.55
New B. B. Chips	.60	@ .70
Manilas—		
New Env. Cut	2.40	@ 2.60
New Cuttings	1.60	@ 1.85
Extra No. 1 old	1.25	@ 1.35
Print	.70	@ .75
Container Board	.60	@ .65
Bogus Wrapper	.75	@ .80
Old Krafts Machine Compressed bales	1.90	@ 2.10
News—		
No. 1 White News	1.50	@ 1.60
Strictly Overissue	.65	@ .75
Strictly Folded	.55	@ .60
No. 1 Mixed Paper	.45	@ .50
Common Paper	.27	@ .32

A Remarkable Range of Grades, Textures and Weights

Orr Endless Felts can now be obtained up to 86 feet in length.

With our enlarged new equipment we can now furnish Paper Manufacturers with endless felts up to 86 feet in length.

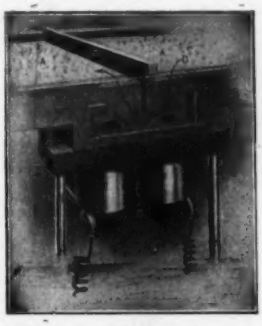
Paper Manufacturers who carefully check manufacturing costs, and also strive to produce more and better paper at a lower cost per ton, prefer the unvarying quality and long service of ORR felts. A trial of them will bring about a preference that will be lasting.

THE ORR FELT & BLANKET COMPANY, Piqua, Ohio

Cotton and Paper Rolls
Super Calenders
Friction Calenders
Embossing Calenders
Hydraulic Presses and Pumps

Successors to the Granger Foundry & Machine Co.

The Textile-Finishing Machinery Company
PROVIDENCE, R. I.

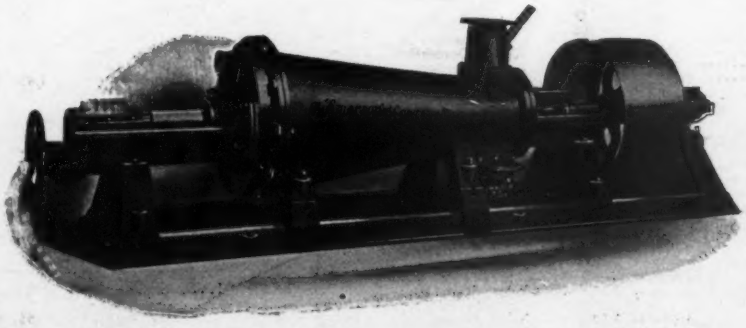


TYPE "B" IRON EXTRACTOR

It consists of special magnetic surfaces of great power over which the paper stuff is made to pass. As a result, all the iron and many other foreign substances are completely extracted. Hundreds of these devices are in use daily and no one of them has failed to give complete satisfaction. Write us for Bulletins and full details.

for **PAPER MAKING**

THE ROLAND T. OAKES CO., Holyoke, Mass.
Electrical Specialists. *Established 1885*



EMERSON MFG. CO.

LAWRENCE, MASS.
See the Second-Hand Machinery ads and note the ABSENCE of

EMERSON BEATING ENGINES

They seldom wear out and are never thrown out. PERFECT CIRCULATION. NO "PADDLING."

The "EMERSON" JORDAN
is made in several sizes, both belt and direct connected motor-drive.

WRITE FOR DETAILS

Twines
(F. o. b. Mill)

Cotton—			
No. 1	.26	@	.27
No. 2	.24	@	.25
No. 3	.22	@	.23
B. C., 18 basis	.36	@	.38
A. B. Italian, 18 basis	.46	@	.51
Finished Jute—			
Dark 18 basis	.24	@	.25
Light 18 basis	.27	@	.28
Jute Wrapping, 3-6 Ply—			
No. 1	.21	@	.23
No. 2	.20	@	.22
Tube Rope—			
4-ply and larger	.18	@	.19
Fine Tube Yarn—			
5-ply and larger	.23	@	.27
4-ply	.24	@	.28
3-ply	.26	@	.30
Unfinished India—			
Basis	.16	@	.17
Paper Makers' Twine			
Balls	.13	@	.15
Box Twine, 2-3 ply	.17	@	.19
Jute Rope	.21	@	.23
Ameri. Hemp, 6	.29	@	.31
Sisal Hay Rope—			
No. 1 Basis	.18	@	.20
No. 2 Basis	.16	@	.18
Sisal Lath Yarn—			
No. 1	.16	@	.18
No. 2	.14	@	.16
Manila Rope	.24	@	.26

CHICAGO

All Rag Bond	.35	@	.41
No. 1 Rag Bond	.25	@	.35
No. 2 Rag Bond	.14	@	.25
Water Marked Sulphite Bond	.09	@	.12
Sulphite Bond	.06¾	@	.11
Superfine writing	.18	@	.24
No. 1 fine writing	.14	@	.18
No. 2 fine writing	.12	@	.14
No. 3 fine writing	.08½	@	.12
No. 1 M. F. Book	.06½	@	.07½
No. 2 M. F. Book	.05½	@	.06¾
No. 1 S.&S.C. Book	.06¾	@	.07¾
No. 2 S.&S.C. Book	.05¾	@	.06½
Coated Book	.07½	@	.12
Coated Label	.07½	@	.10
News—Roll, mill	.03½	@	.04¼
News—Sheets, mill	.03¾	@	.04¾
No. 1 Manila	.04¾	@	.05¾
No. 1 Fibre	.04¾	@	.05¾
No. 2 Manila	.04¼	@	.04¾
Butchers' Manila	.04	@	.04½
No. 1 Kraft	.05¾	@	.06¼
Southern Kraft	.04½	@	.05
No. 2 Kraft	.05	@	.05¼
Wood Tag Boards	.04¾	@	.06¾
Sulphite Screenings	.03	@	.03¼
Manila Tissue—			
24 x 36 sheet	.07	@	.07¾
White Tissue—			
20 x 30 sheet	.07¼	@	.07½
Boards, per ton— (Delivered Central Territory)—			
Plain Chip	40.00	@	41.50
Solid News	42.50	@	45.00
Manila Line Chip	52.50	@	55.00
Container Lined— (Delivered Central Territory)—			
85 Test		@	60.00
100 Test		@	65.00

Old Papers
F. o. b. Chicago

Shavings—			
No. 1 Hard White	3.60	@	3.70
White Env. Cuttings	3.60	@	3.70
No. 1 Soft Shavings	2.90	@	3.00
No. 1 Mixed	1.45	@	1.55
No. 2 Mixed	1.05	@	1.10
Ledger and Writings	1.50	@	1.65
Solid Books	1.15	@	1.25
Blanks	1.65	@	1.75
Kraits	1.80	@	1.90
New Kraft Cuts	2.25	@	2.35
Manila Envelope Cuttings	1.90	@	2.00
Ex. No. 1 Manila	1.40	@	1.55
Print Manila	.90	@	.95
Folded News (overissue)	.75	@	.85
Old Newspapers—			
No. 1	.65	@	.70
No. 2	.55	@	.60
Mixed Papers—			
No. 1	.55	@	.60
Roofing Stocks— F.o.b. Chicago, net cash			
No. 1	30.00	@	—
No. 2	28.00	@	—

BOSTON

Paper
F. o. b. Mill

Ledgers—			
Sulphite	.07½	@	.15
Rag content	.15	@	.30
All Rag	.38	@	.52½
Bonds—			
Sulphite	.06½	@	.11½
Rag content	.17	@	.45
All Rag	.36½	@	.55
Writings	.07	@	.20
Superfines	.22	@	.50
News	.04	@	.04½
Book, Super	.07	@	.10
Book, M. F.	.06¾	@	.09¾
Book, Coated	.08½	@	.20
Coated Litho	.09	@	.12
Label	.09½	@	.15
Jute Manila No. 1	.11	@	.13
Manila, Sul. No. 1	.04¾	@	.06½
Manila, Sul. No. 2	.03¾	@	.04½
No. 1 Kraft	.06	@	.06½
No. 2 Kraft	.05	@	.05¾
Common Bogus	.02¾	@	.02½
Delivered New England points			
Straw Board			57.50
Filled News Board			47.50
Chip Board			45.00
Single Manila Pulp lined board	55.00	@	60.00
Single White, patent coated board bender	75.00	@	80.00
Wood Pulp Board	80.00	@	85.00
Binder Boards	75.00	@	80.00
F. o. b. mill			
Tarred Felts—			
Regular	61.00	@	63.00
Slaters	66.00	@	68.00
Best Tarred, 1 Ply, roll	1.50	@	1.60
Best Tarred, 2 Ply, roll	1.70	@	1.80
Best Tarred, 3 Ply, roll	2.00	@	2.10

Old Papers

Shavings—			
No. 1 Hard White	3.25	@	3.75
White Blank News	1.55	@	1.65
Manila Env. Cuttings	2.00	@	2.25
No. 2 Hard White	3.00	@	3.25
No. 1 Soft White	.03	@	.03¼
No. 2 Soft White	.02½	@	.03
No. 1 Mixed	1.10	@	1.15
No. 2 Mixed	.85	@	.90
Solid Ledger Stock	1.90	@	2.00
No. 1 Books, Heavy	1.15	@	1.25
No. 1 Books, Light	—	@	1.25
No. 1 New Manila	2.25	@	2.50
No. 1 Old Manila	1.50	@	1.75
Print Manila	.85	@	.95
Old Kraft	2.20	@	2.30
Overissue News	.65	@	.75
Old Newspapers	.62½	@	.67½
No. 1 Mixed Paper	.45	@	.52½
Box Board, Chip	.45	@	.60

Bagging
Price f. o. b. Boston

Gunny No. 1—			
Foreign	1.37½	@	1.50
Domestic	1.50	@	—
Manila Rope—			
Foreign	3.25	@	3.75
Domestic	4.50	@	5.00
Mixed Rope	1.25	@	—
Scrap Burlaps	1.25	@	—
Wool Tares, heavy	1.60	@	—
Mixed Strings	1.20	@	1.30
New Burlap Cutting	2.50	@	2.75

Domestic Rags (New)
Price f. o. b. Boston

Shirt Cuttings—			
New White No. 1	.10	@	.10½
Silesias, No. 1	.07	@	—
New Unbleached	.10	@	—
Fancy	.05½	@	—
Washable	.04½	@	—
Cottons—According to Grades—Blue—			
Blue overalls	.07	@	—
New Black, soft	3.50	@	4.00
Khaki Cuttings	.04½	@	—
Corduroy	.03½	@	.04
New Canvas	.09	@	.10

Domestic Rags (Old)
Price f. o. b. Boston

White No. 1	5.50	@	—
Repacked	6.25	@	6.50
Miscellaneous	5.00	@	—
White No. 2—			
Repacked	.04½	@	.05
Miscellaneous	.03½	@	.04
Thirds and Blues—			
Repacked	2.60	@	—
Miscellaneous	2.15	@	2.25
Roofing Stock—			
No. 1	1.65	@	1.70
No. 2	1.45	@	1.55
No. 3	1.15	@	1.25
No. 4	1.15	@	1.25

PHILADELPHIA

Paper
F. o. b. Mill

Bonds	.07	@	.40
Ledgers	.11	@	.40
Writings—			
Superfine	.13	@	.18
Extra fine	—	@	.22
Fine	.20	@	.26½
Fine, No. 2	.16	@	.25
Fine, No. 3	.12	@	.20
Book, M. F.	.06¾	@	.07
Book, S. S. & C.	.06	@	.07½
Book, Coated	.11	@	.16
Coated Lithograph	.09	@	.12
Label	.09	@	.12
News	.03¾	@	.04
No. 1 Jute Manila	.09½	@	—
Manila Sul., No. 1	.04½	@	.06
Manila No. 2	.04	@	.04½
No. 2 Kraft	.05	@	.05½
No. 1 Kraft	.06	@	.06¾
Common Bogus	.02¾	@	—
Straw Board	55.00	@	56.00
News Board	40.00	@	42.50
Chip Board	37.50	@	40.00
Wood Pulp Board	4.50	@	5.00
(Carload Lots)			
Binder Boards—			
No. 1, per ton	85.00	@	90.00
No. 2, per ton	70.00	@	75.00
Carload lots	60.00	@	65.00
Tarred Felts—			
Regular	66.00	@	68.00
Slaters	70.00	@	72.00
Best Tarred, 1-ply (per roll)	1.85	@	1.95
Best Tarred, 2-ply (per roll)	1.55	@	1.70
Best Tarred, 3-ply	2.10	@	2.15
No. 1 Mixed Paper	.65	@	.70

Domestic Rags (New)
Price to Mill, f. o. b. Phila.

Shirt Cuttings—			
New White, No. 1	.11½	@	.12
New White, No. 2	.07	@	.07½
Light Silesias	.07	@	.07½
Silesias, No. 1	.07½	@	.08
Black Silesias (soft)	.05	@	.05½
New Unbleached	.11	@	.11½
Washable	.05	@	.05¾
Fancy	.05½	@	.06
Cottons—according to grades—			
Blue Overall	.07½	@	.08
New Blue	.03½	@	.04
New Black Soft	.05½	@	.06
New Light Seconds	.03	@	.03½
Khaki Cuttings	.05	@	.05½
Corduroy	.03½	@	.03¾
New Canvas	.08	@	.09
New Black Mixed	.05	@	.05¼

Bagging
F. o. b. Phila.

Gunny, No. 1—			
Foreign	3.50	@	4.00
Domestic	3.25	@	3.50
Manila Rope	4.25	@	4.50
Sisal Rope	1.25	@	2.00
Mixed Rope	1.25	@	1.50
Scrap Burlaps	2.00	@	2.25
Wool Tares, heavy	2.00	@	2.25
Mixed Strings	1.75	@	2.00
No. 1, New Light Burlap	3.25	@	3.50
New Burlap Cuttings	3.25	@	3.50

Old Papers
F. o. b. Phila.

Shavings—			
No. 1 Hard White	3.50	@	3.60
No. 2 Hard White	3.00	@	3.25
No. 1 Soft White	2.80	@	2.90
No. 2 Soft White	1.90	@	2.00
No. 1 Mixed	1.50	@	1.60
No. 2 Mixed	.90	@	1.00
Solid Ledger Stock	1.90	@	2.00
Writing Paper	1.65	@	1.75
No. 1 Books, heavy	1.15	@	1.20
No. 2 Books, light	.80	@	.85
No. 1 New Manila	2.40	@	2.50
No. 1 Old Manila	1.50	@	1.60
Print Manila	1.00	@	1.10
Container Manila	.90	@	1.00
Old Kraft	2.00	@	2.20
Common Paper	.50	@	.60
No. 1 Mixed Paper	.60	@	.70
Straw Board, Chip	.75	@	.80
Binders Board, Chip	.75	@	.80
Overissue News	.80	@	.90
Old Newspaper	.60	@	.70

Domestic Rags (Old)

White, No. 1—			
Repacked	5.00	@	5.25
Miscellaneous	4.75	@	5.00
White, No. 2—			
Repacked	.03½	@	.04
Miscellaneous	.02	@	.02¼
Thirds and Blues—			
Repacked	2.50	@	2.75
Miscellaneous	1.75	@	2.00
Black Stockings	3.25	@	3.50
Roofing Stock—			
No. 1	1.55	@	1.65
No. 2	1.40	@	1.50
No. 3	1.25	@	1.35
No. 4	1.20	@	1.30
No. 5A	.90	@	1.00
B	.80	@	.90
C	.80	@	.90

TORONTO

Paper
F. o. b. Mill

Bond—			
No. 1 Sulphite	.12½	@	—
No. 2 Sulphite	.10¼	@	—
No. 1 Colored	.13½	@	—
No. 2 Colored	.11¼	@	—
Ledgers (sulphite)	—	@	.13
Ledgers, No. 1	.36	@	—
Ledgers, No. 2	.27	@	—
Writing	.09¼	@	—
News f. o. b. Mills—			
Rolls (carloads)	3.25	@	—
Sheets (carloads)	3.75	@	—
Sheets (2 tons or over)	4.00	@	—
Book—			
No. 1 M. F. (carloads)	7.75	@	—
No. 2 M. F. (carloads)	7.50	@	—
No. 3 M. F. (carloads)	7.25	@	—
No. 1 S. C. (carloads)	8.25	@	—
No. 2 S. C. (carloads)	8.00	@	—
No. 3 S. C. (carloads)	7.75	@	—
No. 1 Coated and litho	14.50	@	—
No. 2 Coated and litho	13.50	@	—
No. 3 Coated and litho	12.75	@	—
Coated tinted	.15	@	—
Wrapping—			
Rag Brown	4.85	@	—
White Rag	5.25	@	—
"B" Manila	5.65	@	—
No. 1 Manila	6.65	@	—
Fiber	6.65	@	—
Kraft, M. F.	7.20	@	—
M. G.	7.35	@	—

Pulp
(F. o. b. Mill)

Ground wood	30.00	@	32.00
Sulphite easy bleaching	63.00	@	65.00
Sulphite news grade	55.00	@	60.00
Sulphite, bleached	80.00	@	—
Sulphate	65.00	@	—

Old Waste Paper
(In carload lots, f. o. b. Toronto)

Shavings—			
White Env. Cut.	3.60	@	—
Soft White Book shavings	3.00	@	—
White Blk., News	1.50	@	—
Book and Ledger—			
Flat Magazine and Book Stock (old)	1.25	@	—
Light and Crumpled Book Stock	1.10	@	—
Ledgers and Writings	1.40	@	—
Solid Ledgers	1.40	@	—
Manilas—			
New Manila Cut	1.50	@	—
Printed Manilas	1.00	@	—
Kraft	2.25	@	—
News and Scrap—			
Strictly Overissue	.80	@	—
Folded News	.80	@	—
No. 1 Mixed Papers	.60	@	—

Domestic Rags
(Price to mills, f. o. b. Toronto)

	Per lb.		
No. 1 White Shirt Cuttings	.10½	@	—
Fancy Shirt Cuttings	.05	@	.05¼